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A descriptive research study was conducted to (1) develop an information system for collecting and processing information on teacher mobility, (2) obtain information concerning current conditions of teacher turnover in Idaho, (3) field test the instrument and computer programs and (4) provide accurate data about teacher turnover in the nation and selected states for use by administrators, professional organizations, and school boards in formulating constructive means of solving teacher mobility problems. Chi-square and rank-difference correlation analyses of questionnaire data from 63.5 percent of Idaho teachers who resigned positions in 1967 (16.5 percent of the 7,977 certified personnel) revealed that most males left for economic reasons, females for personal and family reasons, with 49 percent also leaving the state. (In addition to conclusions and implications of the Idaho study, the report contains chapters on occupational mobility and career patterns, research related to teacher mobility studies, demographic information related to teacher mobility, and some economically associated aspects of teacher mobility. Also included are a 127-item bibliography and the model information system consisting of the four-page Teacher Mobility Study Questionnaire, a critique of the questionnaire, and computer programs, write-ups, and flow charts for analyzing survey data with either the IBM 1620 Model I computer with 1622 card reader and 20K core or the 1130 Model II-B computer with disk drive and 1132 printer.) (JS)



Project No. 7-H-008

THE DEVELOPMENT OF AN INFORMATION SYSTEM FOR TEACHER TURNOVER IN PUBLIC SCHOOLS (INCLUDING UNIFORM REPORTING AND A COMPUTER PROGRAM)

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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#### SUMMARY

- 1. The teacher turnover in Idaho for the 1966-67 school year was 16.5 percent of the entire teaching force of 7,977 full-time professionally certificated personnel. The turnover accounted for 1313 certificated personnel who resigned their positions—the greatest number reported in Idaho since 1963. The increase in teacher mobility was apparently due to Idaho teachers receiving one of the smallest average salary increases in several years.
- 2. This study was based on the usable responses of 63.5 percent of all teachers who resigned their positions at the end of the 1966-67 school year. By means of a questionnaire this study sought the reasons for resignations of 1055 teachers, with 835 usable questionnaires utilized in this study, or 79.5 percent of the polled group.
- 3. There were statistically significant differences in the reasons reported by the male and female teachers for leaving their 1966-67 positions. These differences were not apparent when all responses were analyzed as a single group but became apparent through sub-group analysis.
- 4. Male teachers who resigned their 1966-67 Idaho positions did so mainly for economic reasons. Female teachers were apparently more influenced by personal and family factors: such as personal reasons, spouse's moving, and salary insufficient.
- 5. Respondents leaving Idaho indicated that economic factors played the major role in influencing their decisions to resign their 1966-67 positions.
- 6. Forty-nine percent of all respondents remained in Idaho, while 46 percent left the state. In proportion, a greater number of males left Idaho than females.
- 7. An information system that can be utilized by any state has been prepared and field tested. Included in the system are: (1) a model questionnaire; (2) a critique of the questionnaire; (3) computer programs, write-ups and flow charts; and (4) examples of output data generated by the computer. By adapting the lead items on the questionnaire, a uniform reporting system to determine teacher mobility is available.



#### CHAPTER 1

#### INTRODUCTION

# I. BACKGROUND, PURPOSE, AND NEED

## Background

Teacher mobility has been and will remain a chronic problem facing school administrators. The extent of staff mobility not only affects local school districts but appears to have far reaching effects on the total statewide education system. Thus, various investigations have been conducted to determine apparent implications from such occupational movement. If one is to study apparent reasons for mobility or turnover, a uniform information system must be established to provide comparative data between and among local school districts and states. To design such a system is, in part, an objective of this study.

Mobility is certainly not a recent phenomenon associated with school personnel management. Reports of superintendents to the U.S. Commissioner of Education during the late nineteenth century were critical of persons who used teaching as a stepping stone to other occupations. standards for those entering the teaching field were very low and teacher supply was rather plentiful; therefore, though turnover was an administrative inconvenience, it was probably not perceived as the perplexing problem that it is today. As educational employment and social conditions gradually changed, a teacher "shortage" developed. In 1907 a speaker at the forty-fifth annual convention of the National Education Association listed three reasons for teacher turnover: (1) marriage, (2) lack of tenure, and (3) politics.1 A cliche often used to describe the itinerant characteristic of teachers was that "teaching was not a profession, but a progression."

As teacher turnover<sup>2</sup> began to be studied systematically, various individuals and organizations desired to

<sup>&</sup>lt;sup>1</sup>National Education Association, Research Division, Some Why's and Wherefores of Teacher Turnover, Research Memo 1960-24 (Washington, D.C.: National Education Association, August, 1960), p. 2.

 $<sup>^{2}</sup>$ In this study, teacher turnover and teacher mobility are synonyms.

determine the magnitude and reasons which were given by teachers for leaving their positions. A serious concern prompted the Idaho Education Association (IEA) to conduct a survey of 1954-55 Idaho teachers who did not return to their positions during the 1955-56 school year. Reasons were sought for a teacher turnover which amounted to 20 percent of the 1954-55 total Idaho teaching corps. The following summarizes the IEA's 1955 study. Data, collected by means of a questionnaire sent to 986 turnover teachers of whom 808 responded, indicated that in 1955:

- 1. Two hundred sixteen teachers moved to other Idaho schools, 233 accepted teaching positions in other states, and 359 left the profession.
- 2. Of the 592 teachers leaving Idaho and/or the profession, 368, or 62.16 percent held a bachelor's degree or beyond. Of the 216 teachers transferring to other Idaho schools, 118, or 54.63 percent held a bachelor's degree or beyond.
- 3. Three hundred fifty-nine, or about 45 percent, of the 808 respondents had from three to ten years of teaching experience.
- 4. Of the teachers leaving their positions, approximately 60 percent were men, 40 percent were women.
- 5. Calculated over the period of time remaining to teach for a career teacher, the salary advantage gained by the average teacher moving to another state to teach ranged from \$20,000 to over \$30,000.
- 6. Considering this salary differential, the teacher turnover study committee was surprised that there had not been a greater migration.<sup>2</sup>

In 1959, as a follow-up to the IEA's survey, the College of Education at Idaho State University, in cooperation with the Idaho Education Association, undertook a study:

... to identify those factors which had the greatest influence in teacher turnover for the State of Idaho during the 1958-59 school year. It was felt that the identification of such factors would be a valuable aid

<sup>1&</sup>quot;The Teacher Turnover Survey," The Idaho Education News, May, 1956, p. 1.

<sup>&</sup>lt;sup>2</sup><u>Ibid.</u>, pp. 1-3.

to school administrators in their efforts to promote teacher satisfaction and retention.1

A comprehensive forced response questionnaire was designed under Judd's supervision and sent to all teachers who changed positions following the 1958-59 school year. Of the twenty factors identified most often by the respondents as being responsible for their decisions to resign their positions, the four primary and most influential factors were concerned with inadequate salaries. Next in importance were factors regarding poor working conditions and lack of teaching materials. Replies often reflected frustration due to excessive class size, inadequate community support, or a perceived dichotomy between educational theory and school practices. Other factors influencing turnover were dissatisfaction with the administration and personal or family plans which necessitated a change of position.<sup>2</sup>

The Judd-Adamson study revealed that teacher turnover for the school year 1958-59 was 18.27 percent of the total Idaho teaching force of 5,920. The percentage reported was slightly less than that indicated by the 1954-55 survey. Although the percent of teachers leaving their positions was less in 1959 than in 1955, the actual number increased from 986 to 1,081 due to a greater number of teachers employed in Idaho schools. Nearly one-fourth of the teachers who resigned from their 1958-59 positions left the state, with the largest number accepting positions in Washington, Oregon, California, and Utah, respectively. 3

A follow-up investigation for the 1960-61 school year was completed for the same purpose as the 1958-59 inquiry: i.e., ". . . to identify those factors which have the greatest influence on teacher turnover in the State of Idaho." Judd and Fugate used the same questionnaire in the 1960-61 study as was used in the 1958-59 study. The investigators concluded that economic factors and working conditions were even more influential factors leading to turnover in 1960-61 than had been determined in 1958-59. However, dissatisfaction with administration and factors pertaining



larthur C. Judd and Harley K. Adamson, Teacher Turnover in Idaho, A report of a study conducted by the College of Education, Idaho State University, at the request of the Idaho Education Association (Pocatello, August, 1960), p. 1. (Multilithed.)

<sup>&</sup>lt;sup>2</sup>Ibid., pp. 16-17.

<sup>&</sup>lt;sup>3</sup>Ibid., p. 2; and Harley Kirk Adamson, "An Analysis of the Teacher Turnover Problem in Idaho, 1958-59" (unpublished Master's thesis, Department of Education, Idaho State University, Pocatello, 1960).

to personal or family plans appeared to be less influential in causing teachers to change positions. 1

The percentage of teacher turnover in Idaho as determined by the 1960-61 study was 15.48 percent of the total Idaho teaching force of 6,930. This was a decrease of 2.79 percent from the 1958-59 turnover. There was also a slight decrease in the number of teachers leaving their positions. In 1960-61, 1,066 teachers changed positions as compared to the 1958-59 turnover of 1,081. Approximately one-third (32.77 percent) of the 1960-61 turnover teachers left Idaho. Again, as in 1958-59, the largest numbers moved to Washington, Oregon, California, and Utah, in that order.<sup>2</sup>

In September, 1963, Elmer S. Crowley, former Executive Secretary of the Idaho Education Association, wrote to Idaho's Governor, then Robert E. Smylie, asking for a statewide study of public education. In his request, Crowley reported that incomplete returns from the 104 high school operating districts indicated that more than 1,177 teachers had left their 1962-63 teaching positions. Mr. Crowley stated that even though the returns were incomplete, they indicated that Idaho's turnover was double the national average. He also pointed out that of the 104 superintendents in the state, twenty-two were new to their positions when school opened in September, 1963.<sup>3</sup>

Teacher turnover in Idaho between the opening of school in 1962 and the corresponding date in 1963 totaled 1,341. This figure was obtained by adding the number of full-time teachers reported by each district as not returning in the fall of 1963 to the districts in which they were employed when school opened in 1963. The total was an increase of 269 teachers from the number, as reported above, who left their positions in 1960-61. A bulletin, issued November 1, 1962, by the Idaho State Department of Education stated that the total number of professional employees in Idaho public elementary and secondary schools, Fall, 1962, was 7,186. This was an increase of 256 professional employees above the 1960-61 total, an increase not quite equal in number to the increased number of turnover teachers.



Arthur C. Judd and T. H. Fugate, <u>Teacher Turnover</u> in <u>Idaho 1960-61</u>, A report of a study conducted by the College of Education, Idaho State University, at the request of the Idaho Educational Association (Pocatello, July, 1962), pp. 1-2, and 16. (Multilithed.)

<sup>&</sup>lt;sup>2</sup>Ibid., p. 2.

<sup>&</sup>lt;sup>3</sup><u>Idaho State Journal</u>, September 11, 1963.

<sup>&</sup>lt;sup>4</sup>Idaho State Department of Education, <u>1962-63</u> Teacher Supply (Boise, November 1, 1962). (Mimeographed.)

The percent of teacher turnover for 1962-63 was 18.66 percent of the state's total certificated teaching corps. The 1962-63 total showed an increase of 3.18 percent over the percent of 1960-61 figure, and an increase of less than one percent over the 1958-59 turnover. Further, the 1962-63 figure was slightly less than the nearly 20 percent turnover reported by the 1954-55 survey (see Table 1-1). Teacher turnover in Idaho appeared to have been stabilized between 15 and 20 percent (see Figure 1).

The school year of 1964-65 opened in Idaho with 7,557 full-time professionally certified teachers and administrators, but 986 left their teaching or administrative positions by September 1, 1965. These 986 persons accounted for a 13.05 percent turnover, or the lowest percentage reported between 1955 and 1965. The reader must be cautioned that these data reflect full-time personnel.

The state of Idaho had a total of 7,977 full-time professionally certificated teachers and administrators in the fall of 1966. At the completion of the 1966-67 school year, 1,313 persons has resigned or left their respective positions. The 1,313 comprised 16.5 percent of the state's teacher corps. This number closely parallels the 1,341 who left at the end of 1962-63 school year. Although the 16.5 percent figure is below the previous high percentages of 18 and 20 percent, the number involved ranks as the second highest (1,341 following 1962-63) since the Idaho mobility studies have begun.

Further, from the data collected concerning Idaho teacher mobility, the average turnover rate for the period 1954-1967 has been computed as being 16.5 percent. To our knowledge, this is the first time that such an average has been established for the state of Idaho. When accurate national mobility rates are established meaningful comparisons can be made.

There appeared to be part-time personnel teaching in Idaho public schools who were not included in these data. A possibility exists that they were hired on temporary bases and should have been included as teachers leaving their positions. However, in order to be consistent with previous studies, only full-time teachers are included. It is a safe assumption that if part-time teachers were included in the surveys, then the percent and numbers of teacher turnover would be greater than that reported. Table 1-1 and Figure 1 present a recapitulation of relevant data for the period between 1954-55 and 1966-67.

In years previous to 1964 the Idaho State Department of Education included all professionally certified personnel in its annual recapitulation of public school employees. There was a slight change in the reporting system beginning



#### TABLE 1-1

# NUMBER AND PERCENT OF FULL-TIME PUBLIC SCHOOL TEACHERS LEAVING THEIR POSITIONS IN IDAHO SCHOOLS DURING SELECTED YEARS

School Year	Total Number of Full-Time Professionally Certified Personnel	Total Number of Full-Time Professionally Certified Per- sonnel Leaving Their Positions	Percent of Total Number of Full-Time Professionally Certified Per- sonnel Leaving Their Positions
1954-55	5289 <sup>a</sup>	986 <sup>b</sup>	20.00°
1958-59	5920d	1081e	18.27e
1960-61 <sup>d</sup>	6930	1066	15.48
1962-63	7186. <sup>£</sup>	1341g	18.66
1964-65	7557 <sup>h</sup>	986	13.05
1966-67	<b>7</b> 977 <b>i</b>	1313	16.5
Totals 1954-67	40859	6773	16.5% (Average Turn- over Rate)

<sup>a</sup>"Financial Trends in Idaho Public Schools, 1941-42 Through 1955-56," <u>Twenty-Second Biennial Report of the State Board of Education, 1954-56</u> (Boise, Idaho, December, 1956), p. 26.

b"The Teacher Turnover Survey," The Idaho Education News (May, 1966), p. 1.

cIbid. dJudd and Fugate, op. cit., p. 2.

eJudd and Adamson, op. cit., p. 2.

fIdaho State Department of Education, 1962-63 Teacher Supply (Boise, November 1, 1962). (Mimeographed.)

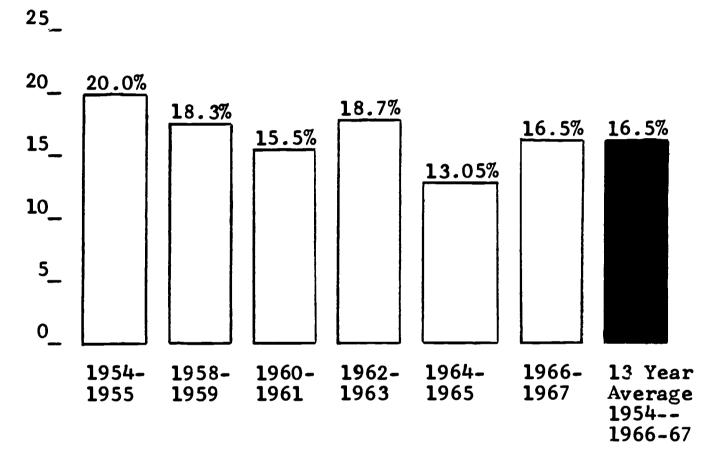
gDonald C. Orlich, Evelyn M. Craven, and R. D. Rounds, Teacher Turnover in Idaho Public Schools: 1963 (Pocatello: Idaho State University, July, 1964), p. 7. (Multilithed.)

hIdaho State Department of Education, Analysis and Preparation in Semester Hours of Elementary and Secondary Classroom Personnel 1965-66, and A Comparison with 1964-65 (Boise, January 1, 1966). (Mimeographed.) "Survey of Teachers' Salaries, School Year 1965-66"; Idaho S.D.E., 1966; and files of Idaho State Department of Education.

iIdaho State Department of Education, Survey of Teachers Salaries, School Year 1966-67 (Boise, 1967), pp. 7-17. (Multilithed.)

ERIC

#### Percent



School Year

Figure 1. Percent of Full-Time Public School Teachers Leaving Their Positions in Idaho Schools During the Interval 1954-55 Through 1966-67 School Years.

in the 1964-65 school year, with the "teacher" category including only classroom teachers and guidance personnel. All other certificated personnel were included in another category which includes elementary, junior and senior high school principals; miscellaneous administrative personnel; and district superintendents. Table 1-2 shows how the total number of full-time certificated public school personnel was computed for the 1966-67 study.

## Purpose of the Study

The purposes in investigating teacher mobility were:

- 1. To examine teacher turnover where possible in the nation and selected states.
- 2. To determine the extent of teacher turnover in Idaho for the 1966-67 school year.
- 3. To identify, by means of a questionnaire sent to all full-time teachers and administrators who changed positions in 1967, those factors which turnover teachers believe influenced their decisions to leave their 1966-67 positions in Idaho schools.
- 4. To provide accurate data about teacher turnover for use by administrators, professional organizations, school boards, and laymen who seek such information for the purpose of formulating constructive means for solving the problems associated with mobility.
- 5. To provide a model applicable to all states to follow to gain reasons for teacher turnover.
- 6. To prepare computer programs for the IBM model 1620 and model 1130 systems to analyze data obtained from the survey.

## Need for the Study

School administrators in Idaho are faced each year with the necessity of replacing many members of the previous year's faculty. In 1959, Idaho School districts replaced more than 18 percent of their teaching force; in 1967, almost 17 percent. In districts where turnover is low, teacher replacement may be a minor obstacle to the district's efficiency. In districts where turnover is relatively high, replacing teachers is a problem of great proportions and of serious concern.

On the national level, this concern is based on an awareness of three major results of teacher turnover. The



TABLE 1-2

DERIVATION OF TOTAL NUMBER OF 1966-67 FULL-TIME IDAHO PUBLIC SCHOOL PROFESSIONAL EMPLOYEES USED FOR THIS STUDY

Category of Personnel	Number
Classroom Teachers (FTE) <sup>a</sup>	7,424
Elementary School Principals (FTE)	159
Junior High School Principals and Assistant Principals (FTE)	75
High School Principals and Assistant Principals (FTE)	89
Miscellaneous Administrative and Ancillary Services Personnel (FTE) <sup>b</sup>	224
District Superintendents	106
Sub-total	8,077
Less estimated Non-certificated	
Administrative and Ancillary Services Personnel <sup>C</sup>	100
Grand Total	7,977

Source: Idaho State Department of Education, Survey of Teachers Salaries, School Year 1966-67 (Boise, 1967), pp. 7-17. (Multilithed.) According to the files of the Idaho State Department of Education, 8,095 full-time certificated personnel were employed in Idaho public schools during the 1966-67 school year. Some personnel are certificated and fall into the category of ancillary services. Thus, the slight discrepancy between the figure used as full-time personnel in this study and the number reported by the Idaho State Department of Education.

<sup>a</sup>FTE indicates Full-Time Equivalents, as reported in the source document. (All numbers were rounded to nearest whole number by the investigators.)

bIncludes assistant superintendents, business managers, transportation supervisors, district supervisors, program directors, part-time health officers and school nurses. (Note: Some of these personnel are not certificated.)

c Estimated by investigators.



first of these is the continuing apparent "teacher shortage." Though qualified college graduates in the field of education are increasing in number each year, they must be used to replace ceachers who leave, and to staff new class-rooms for increased enrollment. There are not enough new teachers available to relieve overcrowded classes, to add needed school services, or to replace unqualified teachers.

The second major facet of teacher turnover affecting local school districts is the apparent economic waste resulting from the expense of teacher recruitment and the cost of providing closer supervision of new employees.

A third result is that of the possible educational loss to pupils as a result of a teacher's reduced efficiency during a period of orientation to the job. Tenure laws generally require a minimum probationary period of three years. Therefore, a sound assumption may be that satisfactory proficiency in a position is gained through some experience.

The three resultants of teacher turnover, (1) the continuing apparent teacher shortage, (2) economic waste, and (3) the educational loss to pupils, exert a detrimental effect on the instructional program. If Idaho schools are to offer the education essential to help prepare citizens for effective participation in our increasingly complex and self-governing society, the educational offerings of the schools must be of the highest quality.<sup>2</sup> In order to obtain high quality, the schools must be assured of a sufficient number of "qualified" teachers who will remain in their positions, thus freeing funds for use elsewhere in the effort to improve instructional programs, rather than on time consuming recruiting drives.

This investigation was conducted to help supply information regarding teacher turnover in Idaho which would

Teacher Supply and Demand in Public Schools, 1967, Research Report 1967-R18, Research Division, National Education Association (Washington, D.C.: National Education Association, 1967), p. 5.

<sup>&</sup>lt;sup>2</sup>Quality in education refers to the degree of excellence present in the educational offering. Quality, or excellence, is an element difficult to quantify. See Chapter X, "Evaluation for Improvement" by Willard S. Elsbree and Harold J. McNally, Elementary School Administration and Supervision (2nd ed.; New York: American Book Company, 1959), pp. 179-192. See also Chapter XII, "The Idea of Excellence" by John W. Gardner, Excellence: Can We Be Equal and Excellent Too? (New York: Harper and Row, Publishers, 1961), pp. 127-134.

meet the needs of administrators, professional organizations, school boards and laymen whose responsibility it is to help solve the problem.

Too, a major purpose of our study was to develop and field test computer programs that may be utilized with IBM 1620 and 1130 computer systems. By preparing a tested set of computer programs that will analyze the data from the questionnaire, we will aid all fifty State Departments of Education and any other researcher who wishes to use our questionnaire as the model. There are over 1,000 IBM 1620 and 1130 computer systems now in operation. This was the reason for our selection of these two very popular "small" sized computers.

In fulfilling the above, a complete description, flow chart and FORTRAN print-out was developed and is included in Appendices B and C.

#### II. THE PROBLEM

#### Statement of the Problem

Specific purposes of this study were to seek answers to the following questions pertaining to the general areas of teacher turnover.

- 1. To what extent did teachers who were employed in Idaho public schools during the 1966-67 school year not remain in the same district for the 1967-1968 school year?
  - a. What percent of the total teacher turnover resulted from transfer of teachers from one school district to another school district within Idaho?
  - b. What percent of the total teacher turnover resulted from transfer of teachers from Idaho school districts to school districts outside the state?
  - c. What percent of the total teacher turnover resulted from teachers leaving the profession?
- 2. What personal characteristics were evidenced by turnover teachers? This would include such items as sex, age, marital status, number of dependents, degree held, and teaching certificate held.
- 3. How did the 1967-68 positions held by the turnover teachers who remained in education compare with the positions they held in 1966-67; with regard to: size of community in which living, size of district and school in



which employed, type of position held, and annual salary?

- 4. How did the 1967-68 positions held by the turnover teachers who are no longer employed as educators compare with the positions they held in 1966-67, with regard to: size of community in which living, annual salary, and type of new job?
- 5. What factors did the above teachers perceive as being most influential in causing them to leave their 1966-67 teaching positions?
- 6. To what degree did dissatisfaction in each of the following areas influence teachers to leave their 1966-67 positions?
  - a. Administrative and Supervisory Factors.
  - b. Community Factors.
  - c. Economic Factors.
  - d. Personal and Family Factors.
  - e. Pupil Factors.
  - f. Working Conditions.

See Appendix A for the questionnaire used in this study.

## Limitations

The study was limited to those professionally certificated personnel who were employed under <u>full-time</u> contract in all Idaho public school districts for the 1966-67 school year, but who were not employed in the same district during the 1967-68 school year.

Not included in the study were substitute teachers, teachers on leave of absence, teachers who taught on an exchange basis, part-time or half-time teachers, full-time junior college teachers, or teachers whose death terminated their occupations.

A tabulation of the returned questionnaires at Idaho State University showed that 846 respondents returned their instruments. Of the 846 questionnaires, eleven were lost at the collection point prior to information being converted to data card coding.

Teachers who retired from teaching during the 1966-67 school year were sent questionnaires; however, several of these questionnaires were returned unmarked except for the word "Retired." Data for 39 retired teachers were not included in the study, and for two persons who had deceased.



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Two Idaho school district superintendents refused to supply forwarding addresses for 88 teachers not employed for the 1967-68 school year. (One district of the two also refused to participate in the 1964 and 1966 studies.) The 38 teachers were counted as part of the general mobility, but they were not included among the turnover teachers to whom questionnaires were mailed; nor among the respondent group. Also, two superintendents reported no turnover in their respective districts following the 1966-67 school year.

A questionnaire was the only means employed for gathering data from the persons surveyed. The data herein presented apply only to those respondents who returned the questionnaires. The data compiled from these responses can be inferential for the total group, i.e., all teachers leaving positions after the 1966-67 school year. If a bias were entered into the data due to the 202 who did not respond, then the bias could not be determined. The impact of the probable bias on the results of this study are not known and could only be subject to speculation.

The sample population consisted of the personnel, as defined in paragraph one of "Limitations," whose completed questionnaires were received at Idaho State University by May 15, 1968.

As stated above, the study was limited to full-time teachers. However, the figures available from the Idaho State Department for the 1966-67 school year included the total number of professional employees. There is no differentiation between full-time and part-time personnel; therefore, the conclusions drawn from a comparison of the figures regarding the full-time teachers of this study with the total professional employees of Idaho's schools are not entirely conclusive but highly indicative of the extent of Idaho teacher mobility. In all likelihood, the extent of Idaho teacher mobility is greater than that herein reported.

## Definitions of Terms

Teachers. In this study, teachers are all professionally certificated personnel employed in Idaho public schools, including elementary and secondary classroom teachers, administrators, and special personnel.

Elementary classroom teachers. Elementary classroom teachers are those persons on the instructional staff
who carry more than half a normal work load instructing
students in one or more grades, kindergarten through six.

Secondary classroom teachers. Secondary classroom teachers are those persons on the instructional staff who



## TABLE 1-3

# RECAPITULATION OF NUMBER AND PERCENT OF 1966-67 IDAHO TEACHERS PARTICIPATING IN 1967 TEACHER MOBILITY STUDY

Total number of Idaho teachers who left their 1966-67 positions	1,313
Number of teachers with addresses to whom questionnaires were sent	1,055
Number of letters returned to investigators due to lack of current or forwarding addresses	101
Number of turnover teachers not responding to survey	101
Number of teachers who stated they retired at end of 1966-67 school year (or had deceased)	41
Number of questionnaires returned to investigators	846
Number of unusable questionnaires	11
Number of questionnaires used in this study	835
Percent of Total Responses from the sample available to investigators (835/1055)	79.5%
Percent of Total Responses of survey (835/1313) Sample compared to Total turnover population	63.5%



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carry more than half a normal work load instructing students in one or more grades, seven through twelve.

Administrators. Administrators are those persons employed by school districts as superintendents, principals and their assistants or counterparts.

Special personnel. Special personnel are those professional staff members who do not serve as administrators nor as elementary or secondary classroom teachers, but who fill positions as librarians, supervisors, speech correctionists, guidance and counseling personnel, or teachers of the physically or mentally handicapped.

Teacher turnover or mobility. Teacher turnover or mobility is the loss of teachers from school districts. The terms "turnover" and "mobility" are used synonymously in this study.

Turnover teachers. Turnover teachers are all elementary and secondary classroom teachers, administrators, and special personnel who changed their 1966-67 teaching positions from one district to another, either in Idaho or outside of Idaho, or who quit the profession.

Teacher transfer. Teacher transfer is the movement of teachers from one district to another within or without the state of Idaho.

Teacher loss. Teacher loss is the loss of teachers from the education profession due to retirement, marriage, military service, or any other reason, such as work outside the field of education.

1966-67 school year. The 1966-67 school year began with the opening of school in the fall of 1966 and ended with the opening of school in the fall of 1967.

## Assumptions

The study was based upon the following general assumptions:

- 1. The extent of teacher turnover common in public schools is, in part, undesirable.
- 2. Teachers are motivated to move from a teaching position by a combination of factors rather than by a single factor.
- 3. Superintendents reported as turnover teachers only full-time personnel.



- 4. A questionnaire sent to each turnover teacher would be a satisfactory means of obtaining relevant information.
  - 5. Valid data would be supplied by the respondents.
- 6. Some common personal characteristics would be evidenced by turnover teachers which might have predictive value for future hiring and retaining of personnel.

## Problems in Gathering Data

A limited amount of research has been done seeking reasons for statewide teacher mobility. The studies vary in approach and detail to such an extent that their conclusions are difficult to compare meaningfully. The investigators corresponded with the United States Office of Education (USOE) in order to obtain relevant national data, but were informed by responsible officials that no national teacher turnover study was being conducted by the USOE.

The construction of a questionnaire, detailed enough to elicit significant information, yet brief enough to require a minimum of the respondents' time to complete, was of major importance to the study.

In a number of cases the forwarding addresses left with the school districts by turnover teachers where they were employed in 1966-67, and subsequently supplied by the districts for use in connection with this study, proved erroneous when the questionnaire was mailed. Further attempts were made to obtain correct addresses and questionnaires were remailed. Even then, 101 questionnaires did not reach their destinations and were returned to the investigators. I

Important to the study was the obtaining of a sufficient number of accurately completed questionnaires so that the data would be meaningful enough to permit some broad generalizations about teacher turnover to be inferred. A total of 1,055 questionnaires were mailed. Of that number 835 were returned in usable form, for a 79.5 percent return. Thus, of the possible number of 1,313 Idaho teachers who left their positions in the 1966-67 school year, this study was based upon the 835 who responded to the questionnaires, or 63.5 percent of the total population.



Interestingly enough, two of the sample group were deceased, but relatives returned the questionnaires with the comments that they had completed the instruments about the way their deceased ones would have. These were excluded from the study.

#### III. METHODS AND PROCEDURES

#### Methods

Three primary steps utilized in conducting this study were to: (1) survey current literature and research concerning teacher turnover; (2) secure the names and addresses of Idaho teachers who did not return to their 1966-67 positions; and (3) construct and refine a question-naire which would elicit information significant to the problem which was to be investigated.

The names and addresses of teachers who did not return to their 1966-67 positions in Idaho schools were requested from the superintendents of each of the 196 high schools operating school districts in Idaho. A secretarial error omitted sending the requests to the 11 elementary school districts. This accounted for 12 turnover teachers being excluded in the sample, but included in the total mobility figure.

A questionnaire was designed to elicit information in four general areas: (1) personal data about the respondent, (2) information concerning the respondent's former location, (3) information concerning the respondent's present location, and (4) the respondent's reasons for leaving his 1966-67 position.

The items on the questionnaire dealing with the factors which caused the respondent to leave his position were planned to reveal not only the causative factors themselves, but, within limits, their degree of influence.

Questionnaires were mailed during the month of April 1968 to 1,055 turnover teachers. May 15, 1968, was established as the final date for receipt of completed questionnaires for use in this study. By that date a total of 835 usable questionnaires had been returned. To aid in obtaining returns, follow-up post cards and follow-up letters with another questionnaire, were mailed to all who had not responded to the initial mailing. As the completed questionnaires were received, data were transferred to electronic data processing cards.

## Analyses and Treatment of Data

Information secured by means of the questionnaire is organized in the following manner:

Data from Parts I and II (items 1 through 36) of the questionnaire are presented in a series of tables, each of which includes total number of respondents replying to a



question, and number of respondents making a particular reply.

Data from Part III (items 37 through 76) of the questionnaire, concerning teachers' reasons for leaving their 1966-67 positions, are tabulated as to number and percent marked for "N, S, M, D." This is similar to the tabulation of the other items.

The data from Part III are organized to indicate "clusters" of reaction within six major areas of influence: Administrative and Supervisory Factors, Community Factors, Economic Factors, Personal and Family Factors, Pupil Factors, and Working Conditions. To determine the extent to which each factor and each major area of influence affected teachers' decisions to leave their positions, the answers to the items within each area were weighted. A numerical value was arbitrarily assigned each possible response. The responses to the items in each of the six areas were then grouped as a "cluster" of response to that major area. This was done in order to determine which major area appeared to have greater significance. See Page 132 for the details.

This study is basically a descriptive survey which attempts to: (1) provide an informative system with national applicability and (2) obtain information concerning current conditions with regard to teacher turnover in Idaho, and (3) field test the instrument and computer programs.

The chi-square test of independence in contingency table technique was used to analyze differences, if any, between teachers moving within and out of Idaho as to:
(1) sex, (2) age, (3) academic preparation, and (4) salary. All chi-square tests were computed with a pre-tested computer program.

The rank-difference correlation (rho) was used to determine if there was any relationship between major subgroup rankings on stated reasons for leaving positions at the end of the 1966-67 school year. These reasons were obtained from Part III of the questionnaire. Through the use of rho, a high correlation is found when items are listed in a similar order, or ranking. Conversely, a low correlation exists when items are listed in different order for two groups.



#### CHAPTER 2

# OCCUPATIONAL MOBILITY AND CAREER PATTERNS

Two closely related social phenomena which are receiving increasing attention from American sociologists are occupational mobility and career patterns. Both are vitally important facets toward a more global understanding of teacher mobility. The following discussion will be concerned with each of these aspects of worklife as they relate to workers in general and to teachers in particular.

#### I. OCCUPATIONAL MOBILITY

Harold L. Wilensky stated that the study of types and rates of mobility is crucial to an understanding of modern society. This statement is readily verified when information such as the following is considered. It was estimated by the U.S. Bureau of the Census that approximately 19.3 percent of the entire population of the United States moved to a different house between March 1, 1965, and March 1, 1966. Of the 19.3 percent of the population who moved within one year, 12.7 percent of the nation's 190 million (over one year of age) moved within the same county. There was an overall interstate and intrastate movement of 6.6 percent of the population. Thus, during a one year period, 12,538,000 people moved either within states or between them. The age group 20-24 years had the greatest rate of mobility. 2

Wilensky also stated that "worklife" mobility may be more fateful than other types.<sup>3</sup> This statement is reinforced by a U.S. Department of Labor publication which reported that in 1961 approximately eight million men and women experienced a job shift, either voluntary or forced.<sup>4</sup>

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Harold L. Wilensky, "Orderly Careers and Social Participation: The Impact of Work History on Social Integration in the Middle Mass," American Sociological Review, XXVI, No. 4 (August, 1961), 523.

<sup>2</sup>U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States: 1967 (Washington, D.C.: U.S. Government Printing Office [USGPO]), p. 34, Table 34.

Table 34.

Wilensky, loc. cit.

4U.S. Department of Labor, Manpower Research, Mobility and Worker Adaptation to Economic Change in the United

States, Bulletin No. 1 (Washington, D.C.: USGPO, 1963),
p. 23.

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Mobility appears to be the outgrowth of characteristics peculiar to American culture. Stewart G. Cole, as cited by James R. Barclay, listed these characteristics as:

- 1. An abiding conviction in democracy with its principles of individual freedom and social control;
- 2. A growing secularization of society with the subsequent de-emphasis of institutional religion;
- 3. The technological pattern of American society wherein energy harnassed by technology is consistently resulting in the reshaping of society;
- 4. The immigration movement and the public school system wherein many disparate elements of our culture were being theoretically neutralized; and
- 5. A social status system based on middle-class values. 1

Barclay continues: "We have indeed accepted the phenomenon of mobility as part of our American technological culture. There is no use in decrying the effects of the phenomenon. On the contrary, from a psychological viewpoint, mobility is still another example of man's ability to adjust and accommodate himself to a changing environment."<sup>2</sup>

## Selected Patterns of Mobility: Who Moves and Why

Studies of mobility patterns and rates within the United States indicate that no striking changes have occurred in mobility since World War II. The movement which has occurred, however, tends toward increasing rates of movement. 3

There are two major types of occupational mobility-geographic and vertical. The first of these types occurs



James R. Barclay, "Mobility, Cultural Change, and Educational Leadership," Family Life Coordinator, XII (July-October, 1963), 98, citing Steward G. Cole, Perspectives on a Troubled Decade, 1939-49 (New York: Harper and Brothers), pp. 109-124.

<sup>&</sup>lt;sup>2</sup><u>Ibid.</u>, p. 98.

Otis Dudley Duncan, "The Trend of Occupational Mobility in the United States," American Sociological Review, XXX, No. 4 (August, 1965), 491.

when an actual change of geographic location takes place resulting in, or from, a change of position. The second type, vertical mobility, occurs when a worker advances to a higher salaried, more prestigious position which may or may not involve geographic mobility.

Barclay summarized some facets regarding geographic mobility within the United States by observing that:

- 1. There is a great degree of mobility in our population;
- 2. There is a tren! toward living in metropolitan areas, particularly in the suburbs;
- 3. The greatest degree of mobility occurs in the young adult period;
  - 4. The West is the area of greatest mobility. 1

In addition, Bershers and Nishiura wrote that in the change of locale, the amount of migration among professionals is greater than among others; college educated people tend to migrate more frequently than others; individuals with six or less years of education are least mobile; farmers and farm operators are not as mobile as the general population; and young adults move more than any other age group.<sup>2</sup>

The U.S. Bureau of the Census reported that job mobility is characteristic of the American worker, and that it is not necessarily associated with geographic mobility. The Bureau's research showed that the economically disadvantaged have a higher mobility rate than the economically advantaged, and that the unemployed have a higher mobility rate than the employed. 3

As part of their theory of labor turnover, March and Simon emphasize that mobility is most influenced by the ease of movement from the organization, which, in turn, is associated with the labor market supply and demand, knowledge of other jobs, and the personal characteristics of

<sup>1</sup>Barclay, op. cit., pp. 97-98.

<sup>&</sup>lt;sup>2</sup>James M. Beshers and Eleanor M. Nishiura, "A Theory of Internal Migration Differentials," <u>Social Forces</u>, XXXIX (March, 1961), 214-218.

<sup>&</sup>lt;sup>3</sup>U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Population Characteristics, Series P-20, No. 118 (Washington, D.C.: USGPO, August 9, 1962), p. 1.

the worker, including age, sex, and social status. Job satisfaction plays, they believe, a lesser role in a worker's decision to leave a position. Their hypothesis seems well verified in public education where the demand for teachers exceeds the supply.

Writing on "The Flow of Occupational Supply and Recruitment," Peter M. Blau stresses vertical mobility as being characteristic of the United States labor market. Blau wrote that ". . . much occupational mobility occurs in our society, particularly much upward mobility. . . ."2 here in simplified form is Blau's thesis that the class structure of American workers consists of three comparatively distinct categories: white-collar workers, blue-collar workers, and farm workers. These groups differ in prestige, income, power, consumption patterns, styles of life, patterns of associations, political attitudes, and many other respects; there is to be sure, also much overlap. Blau contends that these boundaries partly limit the flow of manpower from one occupation to another, and, further, that there is more "upward mobility"--particularly into salaried professional and technical positions -- than "downward" mobility into lower blue-collar and farm occupations. 3

In 1968 the U.S. Department of Labor reported on blue- to white-collar job mobility patterns. The Department's study stated that, "Men in blue-collar jobs constitute a significant pool of trained or trainable manpower for filling expanding white-collar needs."4

Information was acquired for the above cited U.S. Department of Labor study from 542 men in Milwaukee County, Wisconsin, all of whom had made blue- to white-collar job shifts at some time between 1955 and 1961. The writers noted that:

The men were relatively young at the time of the move--typically about 35 or entering managerial jobs and 30 in the other occupations. Over two-thirds saw the move as offering promotion, more responsibility, greater challenge, better opportunity, or other career advantages. Only among clerical and sales workers did



James G. March and Herbert A. Simon, Organizations (New York: John Wiley and Sons, 1958), pp. 93-106.

Peter M. Blau, "The Flow of Occupational Supply and Recruitment," American Sociological Review, XXX, No. 4 (August, 1965), 477.

<sup>&</sup>lt;sup>3</sup><u>Ibid.</u>, pp. 488-489.

<sup>&</sup>lt;sup>4</sup>U.S. Department of Labor, Manpower Administration, "Blue- to White-Collar Job Mobility," Manpower/Automation Research Notice (Washington, D.C.: USGPO, May, 1968).

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as many as 10 percent cite layoffs and plant closings as the reason for the shift. Although the new job involved an initial financial sacrifice for many of the men, over 90 percent of them would make the shift again if they had it to do over.1

It should be realized that over two-thirds of the men studied made the shift within the same firm, and at the employer's request in two out of these cases. In "Blue-to White-Collar Job Mobility," the writers further observed that:

Generally, there was no significant carry over of actual duties from the blue-collar job, but some of the skills were transferable. The most important involved interpersonal relationships, general technical skills. . . , and specialized knowledge of the company and the materials and processes used on the job. 3

The degree of skill required by workers determines mobility to some extent. Another U.S. Department of Labor publication states:

There are greater differences in mobility between workers of different degrees of skill in the same occupation than there are between workers in different industry groups. Usually the occupations that require a lot of training and experience are the most stable. But even the most highly skilled worker groups have some degree of mobility.4

Some sociologists have long feared that the American social structure is becoming more "rigid" and the occupational structure providing more restricted opportunities. The facts of occupational mobility tend to disprove this hypothesis. Recent patterns feature more movement, generally "upward."

# Patterns of Mobility Among Teachers

Investigations of teacher mobility observed W. W. Charters, Jr., frequently seek to identify "the patterns of occupational mobility within the teaching career--geographical movement from community to community or vertical

<sup>&</sup>lt;sup>1</sup>Ibid. <sup>2</sup>Ibid. <sup>3</sup>Ibid.

<sup>4</sup>U.S. Department of Labor, The American Workers' Fact Book, 1960 (Washington, D.C.: USGPO), pp. 25-26.

<sup>&</sup>lt;sup>5</sup>Duncan, <u>loc. cit</u>.

mobility from one level to another and into the administrative hierarchy." The accompanying flow chart (see Figure 2), showing sources of incoming teachers and destinations of those who leave, is one such attempt. Designed to accompany the U.S. Department of Health, Education, and Welfare Office of Education study of teacher turnover in 1959-60, the chart shows what sources exist to supply teachers and where they go when they leave school systems.

Several northwestern state departments of education include among their information concerning teachers, statistics which suggest geographic mobility patterns. For example, in Oregon, teachers new to the state in 1965-66 came mainly from Washington, California, and Idaho, in that order. The majority of Washington and California teachers migrating to Oregon were experienced. The Idaho teachers were mainly inexperienced.<sup>2</sup>

Of the 1966-67 Utah teachers who had taught in another state the preceding year, the greatest number came from California, Idaho, and Arizona, respectively.<sup>3</sup>

The 1967-68 locations of former Washington teachers included forty-four of the fifty states, as well as U.S. military schools, the Canal Zone, and various foreign countries. By far the greatest number moved to Oregon and California, with Alaska, Hawaii, and Idaho receiving approximately one-fifth as many as each of the first two states. 4

The same year (1967-68), Washington acquired the services of 1,726 teachers from out-of-state, over 1,200 of whom were experienced teachers. The in-migrants came from forty-eight states, the Peace Corps, and various foreign countries. Oregon supplied the greatest number, California approximately two-thirds as many, Idaho and Montana about half as many as Oregon.



<sup>&</sup>lt;sup>1</sup>W. W. Charters, Jr., "Some 'Obvious' Facts about the Teaching Career," <u>Educational Administration Quarterly</u>, III, No. 2 (Spring, 1967), 189.

<sup>&</sup>lt;sup>2</sup>Oregon State Department of Education, Division of Administrative Services, Research Section, "Reporting Research" (March, 1966), p. 1. (Multilithed.)

<sup>&</sup>lt;sup>3</sup>Utah State Board of Education, <u>Status of Teacher</u> <u>Personnel in Utah, 1966-67</u> (Salt Lake City [no date]), p. 152, Table 139. (Multilithed.)

<sup>4</sup>Louis Bruno, "Teacher Supply and Demand in Wash-ington, 1967-68," A report of a study directed by the State Superintendent of Public Instruction (Olympia, 1968), p. 10, Table XI. (Multilithed.)

<sup>&</sup>lt;sup>5</sup>Ibid., pp. 10 and 9, Tables XII and IX, respectively. -25-

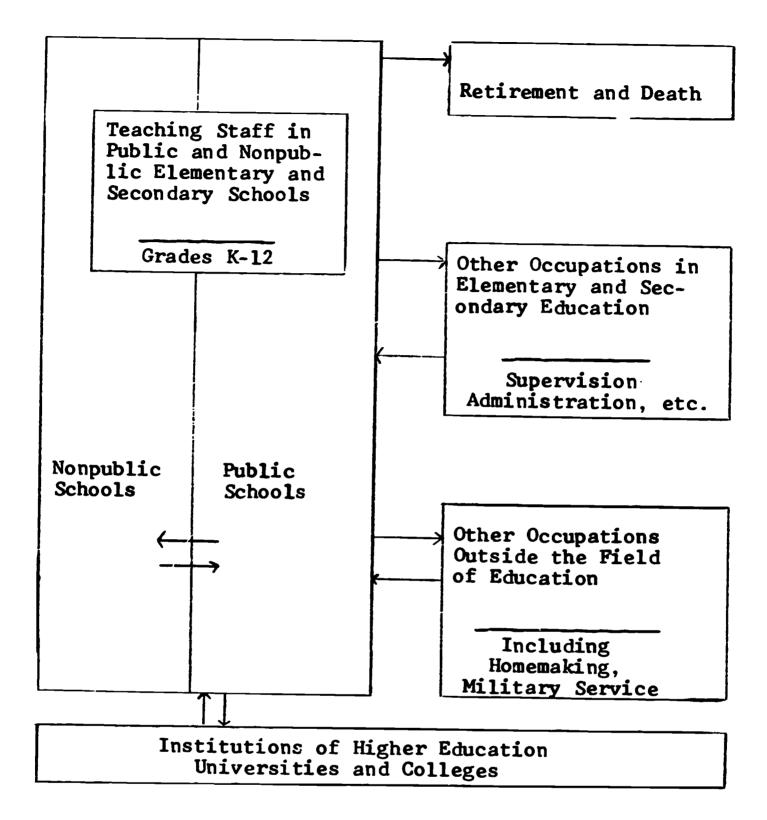


Figure 2. Flow Chart Showing Sources of Incoming Teachers and Destinations of Those Who Leave.

Source: Frank Lindenfeld, Teacher Turnover in Public Elementary and Secondary Schools, 1959-60, Office of Education, U.S. Department of Health, Education, and Welfare, Circular No. 675 (Washington, D.C.: USGPO, 1963), p. 3. Note: Transfers of teachers among school districts are not shown.

Of the Idaho teachers who left their positions at the end of the 1964-65 school year over one-half remained in Idaho, while nearly one-fourth moved to Washington, Oregon, Utah, California, and Nevada, with the greatest number migrating to Washington.

The above information from Oregon, Utah, Washington, and Idaho indicates that there is much interstate mobility of teachers within the northwestern states. The northwest states teacher mobility closely parallels that of the west in general. Of the four major geographic regions of the USA, the west had reported the greatest net migration (mobility) between 1950 and 1960. Thus, it can be concluded that teacher mobility is but one aspect of the more encompassing phenomenon of mobility per se.

Some mobility even precedes entry into the profession for a substantial number of teacher education graduates. Of the 172,039 teacher education graduates from all U.S. teacher preparatory institutions in 1965-66, 56.6 percent were teaching by November, 1966, in the state where they were graduated. By the same date those teaching outside the state where they were graduated totaled 15.5 percent. Thus, in round numbers, 72 percent had entered teaching, but 28 percent (approximately 46,200 persons) were either not teaching or their occupations were unknown. Of the male graduates, 51.5 percent taught in the state where they were graduated while 14.3 percent taught in another state. Among female graduated with 16.1 percent teaching in another state.

Among Idaho teacher education graduates who graduated between September 1, 1965, and August 31, 1966, 68.9 percent of all those who qualified to teach with a standard certificate in elementary schools began their teaching careers. However, 40.9 percent remained in Idaho while 28.0 percent taught outside the state. At the secondary level 51.1 percent of those qualified to teach in secondary schools entered teaching. Approximately half of these teachers remained in Idaho; the other half left the state. 4



Donald C. Orlich, David L. Crowder, and R. D. Rounds, <u>Idaho Teacher Mobility: 1965</u> (Pocatello: Idaho State University, July, 1966), p. 71, Table 3-1.

<sup>&</sup>lt;sup>2</sup>Statistical Abstract of the United States: 1967, op. cit., p. 35, Table 35.

National Education Association, <u>Teacher Supply and Demand in Public Schools</u>, 1967, Research Report 1967-R18 (Washington, D.C.: NEA, October, 1967), pp. 24-25, Table 7. These data reflect only graduates "with qualifications for standard certificates."

<sup>4&</sup>lt;u>Ibid.</u>, p. 29, Table 10.

This information supports the observation that young adults are a highly mobile population group. Further, newly prepared teachers cannot be expected to remain immobile. They will, apparently, exhibit the rather high degree of mobility that is associated with professional personnel.

Another important aspect of teacher mobility is the tendency of teachers to migrate from smaller to larger schools. As noted in a 1958 Nebraska study, "the ladder of success in teaching in the state has long been one of teaching in a small school, then a larger school, later in a still larger school." The same phenomenon was reported about Idaho's teacher mobility patterns for 1965 by Orlich, Crowder, and Rounds. These findings are consistent with those reported by the U.S. Office of Education survey which, in 1963, reported that higher rates of turnover were found in districts of less than six hundred enrollment than were found in larger districts.

Young adults contemplating entrance into teaching are highly mobile--from the view of entrance into the occupation as well as being geographically mobile. The NEA's Teacher Supply and Demand in Public Schools, 1967 gives comparative data concerning location of teacher education candidates on November first following their graduation tetween 1956, 1961, and 1966. Table 2-1 presents a summary of the findings.

Observe in Table 2-1 during the three selected years the number of graduates in both elementary and secondary teaching areas more than doubled. However, the percent who actually entered teaching by November first following their graduation has remained surprisingly constant--about two-thirds for elementary teachers and one-half for secondary.

In addition to the above listed factors which affect teacher mobility there seems to be other conditional factors at play. For example, in 1952, Howard S. Becker concluded that the mobility pattern for Chicago public school teachers was from the slums to middle-class neighborhoods. Several



<sup>1</sup>A. R. Lichtenberger, "Rates of Teacher Turnover in Nebraska Public Schools 1956-57, 1957-58," Nebraska Research Brief, II, No. 1 (Lincoln: Nebraska Department of Education, 1958), p. 1. (Mimeographed.)

<sup>&</sup>lt;sup>2</sup><u>Ibid.</u>, pp. 103-105.

<sup>&</sup>lt;sup>3</sup>Frank Lindenfeld, Teacher Turnover in Public Elementary and Secondary Schools 1959-60, Office of Education, U.S. Department of Education, Circular No. 675 (Washington, D.C.: USGPO, 1963), inside front cover.

Howard S. Becker, "The Career of the Chicago Public School-teacher," American Journal of Sociology (March, 1952), p. 29.

TABLE 2-1

LOCATION OF TEACHER EDUCATION GRADUATES
ON NOVEMBER FIRST FOLLOWING THEIR
GRADUATION FOR SELECTED YEARS

		Years	
Levels of Preparation	1956	1961	1966
Elementary School			
Percent teaching in state where graduated	67.2%	67.3%	64.4%
Percent teaching outside the state where graduated	13.6	15.9	16.4
Percent not teaching	11.2	9.0	8.4
Percent employed status not known	8.0	7.8	10.8
Information above based on what number of graduates	32,548	45,749	66,571
Number included above com- prising what percent of total respective graduat- ing class	83.6%	83.7%	83.6%
Secondary School			
Percent teaching in state where graduated	50.7%	52.7%	51.3%
Percent teaching outside the state where graduated	12.5	15.7	15.3
Percent not teaching	27.3	21.6	20.0
Percent employment status not known	9.5	10.0	13.4
Information above based on what number of graduates	43,990	68,298	97,546
Number included above com- prising what percent of total respective graduat- ing class	77.5%	88. <b>3</b> %	85.2%

Source: National Education Association, <u>Teacher</u>
Supply and <u>Demand in Public Schools</u>, 1967, Research Report
1967-R18 (Washington, D.C.: NEA, 1967), p. 28, Figure 111.

years later, in 1968, in an article published in Chicago's Sunday American, Wesley Hartzell introduced a new variable to teacher mobility. "The new variable," wrote Hartzell, "might be called teacher 'idealism,' whereby a topnotch teacher will flatly turn down a high-paying slot in a lily-white suburban school for the challenge of an over-crowded classroom full of underprivileged students." The trend described by Hartzell began about 1963 and appears to be marked by the same idealism which helps to staff the Peace Corps. Should the trend continue and become a definite mobility pattern it is possible that the problems of slum-area schools would be minimized. However, the overall tendency has been for metropolitan teachers to leave slum schools for the better conditions offered in the suburbs.2

Thus, the problem of teacher mobility which at a cursory gimpse appears to be easily solved becomes a somewhat complicated matrix. These complications will be further identified in the section which follows.

#### II. CAREER PATTERNS

#### Career Patterns Defined

A second major social phenomenon to be discussed in this chapter in relation to teacher mobility is that of career patterns. Wilensky defines <u>career</u> as "a succession of related jobs, arranged in a hierarchy of prestige, through which persons move in an ordered (more-or-less predictable) sequence."

Walter L. Slocum further clarifies the meaning of the term <u>career</u> by distinguishing between it and <u>jobs</u>.

A job consists of work that a person does to obtain money or other immediate rewards. Although a job may provide considerable satisfaction, it does not ordinarily involve a long-term commitment. An occupational career is different. The ideal model of a career calls for entrance at the bottom of a career line, movement upward through progressively



Wesley Hartzell, "How Ideal Is Your Suburb School?" Chicago's Sunday American, LXXXVII, No. 44 (March 10, 1968), 1.

James B. Conant, <u>Slums and Suburbs</u> (New York: McGraw-Hill, 1961), pp. 66-69. Although this book was written in 1961, staffing the nation's so-called "slum schools" appears in 1968 to be a problem of serious magnitude.

<sup>&</sup>lt;sup>3</sup>Wilensky, <u>op. cit</u>., p. 523.

more responsible steps or stages to the pinnacle, followed eventually by retirement.

If the job history of an individual reveals a sequence of jobs within a single occupation, "the individual has had an orderly career, for in each job he has employed skills, knowledge or experience directly related to the others," wrote Thompson, Avery and Carlson. If an individual's career has involved a switch of occupations it is known as a disrupted career. Among teachers both of these career patterns are evident.

When preparation for entry into an occupation requires acquisition of specialized knowledge or skill which is not available to the general population, and entry into the occupation as well as level of competence therein is judged by the occupational group rather than the enterprise, the occupation is said to be collegially defined. If the occupation by its intrinsic nature allows the worker, through normal progression, to reach the top early in his career, the occupation is said to have an early ceiling. In such occupations the employing enterprise is viewed as a place to practice the occupation while remaining alert to opportunities to practice the occupation elsewhere under more rewarding circumstances. Usually, the individual passes through a series of ranks and reaches a ceiling rather early in his career. Since this ceiling is frequently reached prior to peak economic demands on the individual, he may resort to a strategy of stability through collective action, via unions or professional organizations, to improve the position of the occupation, and thus of himself. The longer the individual remains in an organization, the greater his investment in it, and the more reluctant he becomes to leave. 3

Yet, an individual, upon reaching an early ceiling, may choose to adopt an enterprise strategy, moving out of

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Walter L. Slocum, "Sociological Contributions to Occupational Guidance Through the Curriculum" (unpublished paper, Washington State University), pp. 10-11. (Mimeographed.)

James D. Thompson, Robert W. Avery, and Richard O. Carlson, "Occupations, Personnel, and Careers," Educational Administration Quarterly, IV, No. 1 (Winter, 1968), 8. (This entire article is recommended as a thorough discussion of the subjects mentioned in the title as well as for further clarification of the ensuing terminology.)

<sup>3</sup>Ibid., pp. 17-21. (It would do well to remember that on March 21, 1968, the Idaho Education Association imposed statewide "Sanction" on the state with the hope of improving teaching conditions, including salaries. Too, this study has shown that Idaho teachers do, in fact, move out of the state with rather great frequency.)

the original occupation into a new one where collegial approval is of less importance. The most frequent path is into administration in which the ceiling comes at a later time. This is often the pattern when the individual is the primary income-producer for the family. I

It should be remembered that three most important bases of careers are competence, aspiration, and the structure of opportunities as perceived by the individual. It is the interplay of these factors which results in the evolvement of a career pattern.<sup>2</sup>

#### Career Patterns of Teachers

It is evident from the above brief discussion of career patterns that the role of the classroom teacher is a collegially defined role with an early ceiling. For those who remain in teaching, it is an orderly career. For others, teaching may be part of a disrupted career. Both the stability strategy and enterprise strategy may play a part in the lives of individuals who remain in the profession.

W. W. Charters, Jr., has had a long-term research interest in the evolvement of careers of teachers and administrators. Charters concludes that there are two dominant career patterns for teachers, and that these patterns are determined by sex. In an article titled "Some 'Obvious' Facts about the Teaching Career," Charters wrote:

Female teachers, and male teachers, too, are recruited from virtually all walks of life, with the important proviso that persons who cannot afford a college education are systematically excluded. female has made up her mind to become a teacher before leaving high school; she obtains a bachelor's degree and immediately takes her first teaching job. If not already married, she marries soon and continues in her first position for two, three, or four years, when she leaves the position to bear and raise children. She is now in her middle 20's. When her last child is old enough to go to kindergarten--ten or fifteen years later--she may return to classroom teaching. If she does return, the odds are strong that she will remain in teaching, and teach in the same school system, until she reaches retirement age.



libid. (This pattern fits the male teacher, but apparently does not describe the female teacher.)

<sup>&</sup>lt;sup>2</sup><u>Ibid</u>., p. 9.

Male teachers decide to enter their field sometime after high school graduation and are older than females by the time they are ready to take their first job. They remain in classroom teaching for a longer period of time than their female counterparts, possibly changing schools once. In the meantime, they work at jobs outside public education after school hours and during the summer. When they are in their 30's, male teachers swarm out of classroom teaching either into non-public school occupations or, for a smaller number, into school administration. They never return to the classroom.

Those are the dominant career patterns for men and women. They describe anywhere from 60 to 75 percent of the persons entering public education at mid-century.

Other researchers tend to substantiate Charters' conclusions. A survey conducted by the NEA Research Division in 1959-60 noted:

That 44.1 percent of the public-school teachers had interrupted their careers since beginning teaching. The mean length of the interruption was 8.3 years. About 7.5 percent of the teachers had interrupted their careers for longer than 15 years. As may be expected, interruption in their teaching careers was much more widespread among married women teachers (61.1 percent) than among either single women teachers (24.4 percent) or men teachers (24.0 percent).<sup>2</sup>

As an outgrowth of recognition of the dominant career patterns among teachers, research has been instituted to determine if a few individual attributes, easily discernible at the time of employment, can be used to predict service expectancy of teachers. Emphasis in such research is being placed on "survival" within the teaching career rather than on separation.

Whitener followed the careers of 937 entering teachers in nine school systems in the St. Louis area and one out-of-state system over a ten year period. Service tables similar to mortality tables were prepared. Survival curves were constructed for schools and various classes of teachers. Results of the study showed that there were three distinct periods in rate of withdrawal



<sup>&</sup>lt;sup>1</sup>W. W. Charters, Jr., "Some 'Obvious' Facts about the Teaching Career," <u>Educational Administration Quarterly</u>, III, No. 2 (Spring, 1967), 184. (This article is recommended in its entirety.)

<sup>2</sup>National Education Association, <u>Teacher Supply and Demand in Public Schools</u>, 1966, Research Report 1966-R16 (Washington, D.C.: NEA, October, 1966), p. 10.

from school systems: the period of rapid transit, the period of gradual accommodation, and the period of sustained association. Higher survival rates were associated with longer years of service. The age of entry into the school system was found to be the best single predictor of length of service. The older the teacher at the time of entry (up to age 54), the greater the possibility of remaining at least ten years. Survival rates were higher for men and single women than for married women.1

Survival in a teaching career concluded Whitener is more heavily influenced by the attributes of the teachers employed than by institutional characteristics, and that the actuarial process has practical application in helping to reduce teacher mobility.<sup>2</sup>

Charters, working in connection with the "Career Processes Program," has found that the first three or four years are "high risk" years within the orderly career pattern. Only about 20 percent of the incoming teachers during any school year are still in the nation's classrooms at the end of the first five years. Charters states that it is who is employed as a teacher in the first place that makes a difference in the survival expectancies of teachers. His work corroborates Whitener's findings that age and sex are critical factors. 3

## Career Patterns of Females

The importance of women in the nation's work force cannot be under-rated for they comprise one-third of those working. Since two out of every three public school teachers are women, it behooves us to comment briefly on



See Joy Eugene Whitener, "An Actuarial Approach to Teacher Turnover" (unpublished Doctoral dissertation, Washington University, St. Louis, Missouri, 1965); and W. W. Charters, Jr., "Teacher Survival Rates Examined in Career Processes Program," Research and Development Perspectives, CASEA-ERIC/CEA News Bulletin (Eugene: University of Oregon, Winter, 1968), p. 1.

<sup>&</sup>lt;sup>2</sup>Whitener, <u>loc. cit</u>.

<sup>3</sup>Charters, "Teacher Survival Rates Examined in Career Processes Program," op. cit., p. 2. (See also W. W. Charters, Jr., "The Relation of Morale to Turnover Among Teachers," American Educational Research Journal, II, No. 3 (May, 1965), 166-172.)

the general topic of the working female. Mary Dublin Keyserling, Director of the Women's Bureau of the U.S. Department of Labor, wrote that:

The American woman, as part of the changing world about her today, performs not only her basic role within the family unit but assumes other obligations that are necessitated by the times in which she lives and by her sense of responsibility to the community as well as to her family. . . . For many women, including those who have children, new patterns of life include paid employment, although such work may be intermittent or on a part-time basis.<sup>2</sup>

From observation, it appears that a large proportion of female teachers are married and, also, appear to be working mothers. The latter group--working mothers-- are defined as mothers who have children under 18 years of age. In 1965 working mothers constituted 37 percent of the total number of the nearly 26 million women workers in the United States. Further, almost one out of three mothers were in the labor force in March 1965 as compared with less than one out of ten in 1940. 3

Working mothers seek employment basically to augment the family income. The more formal education that a woman has, the more likely she will be found in paid employment. Other factors which influence mothers to work are job availability and the number of hours required to be on the job. Mothers with young children tend to have a strong preference for part-time or part-year jobs. 4

In 1965, the median age for working mothers with children under 18 was 38 years. This was slightly below the 41 year median age for all women workers employed in the U.S. labor force. Closely paralleling these data were those reported by the NEA for February, 1965. The mean age of all male teachers for the same year was 35.3 years.



National Education Association, Rankings of the States, 1968, Research Report 1968-R1 (Washington, D.C.: NEA, 1968), p. 20, Table 33.

<sup>&</sup>lt;sup>2</sup>Mary Dublin Keyserling, "Who Are the Working Mothers?" U.S. Department of Labor, Women's Bureau, Leaflet 37 (Washington, D.C.: USGPO, 1966).

<sup>&</sup>lt;sup>3</sup>Ibid. <sup>4</sup>Ibid. <sup>5</sup>Ibid.

<sup>6&</sup>quot;Status of Public-School Teachers, 1965," NEA Research Bulletin, XXXXIII, No. 3 (October, 1965), p. 69, Table 1.

Several investigators have attempted to study and predict the vocational interests and career patterns of the American women. Strong expressed frustration in his work with the development of the Strong Vocational Interest Blank (SVIB) by stating that ". . . too many women take a job because it is convenient, not because they intend to continue in it." In 1939, Crissy and Daniel suggested that women were more interested in the directions of social competence and homemaking than in pursuing a long-term career. 3

Leona Tyler hypothesized that Crissy and Daniel's "male association" factor, i.e., that women tended to have a clustering of interests related more to homemaking interests than to one career area, represents a general attitude and outlook for the non-career oriented female. Tyler further stated that the non-career woman ". . . is satisfied to pursue any pleasant, congenial activity that offers itself until marriage."

Female career orientations were divided into four categories by Barbara E. Summerville. These were:

(1) The primarily academic-professional oriented;

(2) the academic-professional oriented who expressed marriage and homemaking interests also; (3) the traditional woman's role oriented who expressed interest in working until marriage; and (4) the primarily traditional woman's role oriented.<sup>5</sup>

Summerville's first, second, and third categories appear especially applicable to those females who enter teaching.

Not only do women comprise a third of those working, but they also constitute that segment of the work force most susceptible to gross changes in rates and numbers. In this regard, Rosenfeld and Perralla of the U.S. Department



We are tempted to write, "but with no avail"; however, academic responsibility prohibits it.

<sup>&</sup>lt;sup>2</sup>E. K. Strong, Jr., <u>Vocational Interests of Men and Women</u> (Stanford: Stanford University Press, 1943), p. 30.

<sup>&</sup>lt;sup>3</sup>W. J. Crissy and W. J. Daniel, "Vocational Interest Factors in Women," <u>Journal of Applied Psychology</u>, XXIII (1939), 488-494.

<sup>&</sup>lt;sup>4</sup>Leona Tyler, <u>The Psychology of Human Differences</u> (New York: Appleton-Century-Crofts, 1947), p. 85.

<sup>&</sup>lt;sup>5</sup>Barbara Ellen Summerville, "The Direction of Motivation in Women" (unpublished Master's thesis, Washington State University, Pullman, 1968), p. iv.

of Labor wrote, "Mary can choose whether they want to work. Their choices have important social and cultural effects."1

In their study about female job mobility, Rosenfeld and Perralla stated that the work plans for most women present a great degree of uncertainty. Younger women, between the ages of 18-24, expected to work about one to five years. The expectation reported for discontinuance of work given by women in the 18 to 34 age category concerned family obligations. This reason was verified by studying women who left the labor force in 1963 and had not re-entered by February 1964. Eighty-nine percent of those women were married, with pregnancy being by far the most important reason why married women under 35 years left the labor force. Previous studies on teacher mobility--as well as this one--which are discussed in later chapters show that family obligations and pregnancy play critical roles in determining female teacher mobility.

#### III. SUMMARY

Understanding of and attention to career patterns by administrators may, in time, help to reduce teacher mobility. For, if a stable faculty is desired, then superintendents should seek: (1) males with at least four or five years of teaching experience, (2) former teaching females who have had all the children they expect to bear, or (3) single females with teaching experience, but who may not be interested in matrimony as a way of life. (We shall assume competence in all cases.)

What this suggests, and it is our intent, is that highly competitive superintendents actually "raid" those schools, districts or states that cannot compete in the teacher market place. The meager evidence presented thus far in this study apparently shows that Oregon and Washington, at least, do attract (raid?) experienced as well as inexperienced Idaho teachers. The evidence that has been obtained from five previous Idaho turnover studies shows that it is chiefly the economic gains that Idaho teachers can receive that attract them to other western states. The latter point will be discussed at greater length in this monograph.

Too, if a superintendent is forced into hiring a very large proportion of additional or replacement teachers



Carl Rosenfeld and Vera C. Perralla, "Why Women Start and Stop Working: A Study in Mobility," U.S. Department of Labor, Bureau of Labor Statistics, Special Labor Force Report No. 59 (Washington, D.C.: USGPO, September, 1965), p. 1077. From The Monthly Labor Review, Reprint No. 2476, September, 1965.

<sup>&</sup>lt;sup>2</sup><u>Ibid.</u>, pp. 1077-1081.

from graduating seniors, then he must face the reality that the turnover rate of those novices will be exceedingly high, especially if the graduates are young, single women. The work of Charters and Whitener tacitly demonstrates that a school district can unknowingly force itself into perpetuating rather high rates of mobility through hiring procedures, i.e., seeking young single males and females and newly graduated teacher education candidates. School administrative staffs must analyze not only the preparation of their colleagues, but also age, sex, and experience if they are to maintain a somewhat stable faculty.

#### CHAPTER 3

#### RESEARCH RELATED TO TEACHER MOBILITY STUDIES

Teacher mobility is a matter of increasing concern to those persons associated with staffing the nation's schools, especially personnel directors. As a result of this concern, studies have been conducted in an attempt to ascertain the magnitude of turnover within the nation, state, or specific districts, and to identify key factors which cause teachers to leave their positions. The studies vary widely in scope and methodology. Consideration of the findings of selected investigations will be of value in identifying comparative data with which to evaluate Idaho teacher mobility.

The following discussion of related research is subdivided into four areas of interest. The first is a brief overview of the effects of teacher mobility; the second deals with the extent of teacher mobility; the third with stated causes of teacher mobility; and the fourth with common characteristics discernible in teacher mobility.

#### I. APPARENT EFFECTS OF TEACHER MOBILITY

Although most teacher mobility studies are primarily concerned with either magnitude or cause of turnover, the effects resulting from the withdrawal of teachers from their positions cannot be ignored. Indeed, the effects of continued high mobility, either interdistrict or intrastate, may have cumulative adverse effects on curriculum and staff planning. That is, as personnel who become knowledgable to innovations and the day-to-day implementation of them, leave their jobs, continued and ever increasing inservice education programs must be instituted within the schools. This is, of course, a local problem--but it costs time, effort--and, ultimately, money to orient new personnel.

A. R. Lichtenberger in a survey of teacher mobility in Nebraska stated that:

Within reasonable limits, high rales of turnover of personnel indicate lowered efficiency in any enterprise. Schools are no exceptions.



<sup>1&</sup>quot;Rates of Teacher Turnover in Nebraska Public Schools 1956-57-1957-58," Nebraska Research Brief, II, No. 1 Lincoln: Nebraska Department of Education, 1958), p. 1.

Valiant efforts to improve teaching have limited long-range results when teaching staffs are riddled year after year through loss of teachers. A concerned citizenry should fully understand the virtual impossibility of maintaining good schools when teaching staffs cannot be held together from year to year. 1

As has already been briefly mentioned above, one of the most serious outcomes of teacher turnover is the loss of continuity in the instructional program. This aspect is of grave concern to educators who are responsible for the intellectual growth of pupils. Rulon Ellis, Superintendent of Schools for the Pocatello, Idaho, School District, in commenting on a 1967-68 school district turnover rate of more than 23 percent, is quoted as stating that: "Such high turnover figures place the continuity of our total program in jeopardy. We do not have the personnel or funds that are necessary to supervise and conduct the inservice training and orientation programs these new personnel need to fit into our system."<sup>2</sup>

A second disturbing aspect of high staff turnover is the expenditure of time, energy, and money necessary to replace experienced teachers. The efforts--whether cime or monetary--are thus proportionately withdrawn from the district's primary objectives or from other educational priorities. Maurice J. Ross, Connecticut State Department of Education, wrote that: "Exclusive of persons in new teaching positions, more than one classroom teacher in ten is new to his or her particular school district. This turnover may have considerable significance for instruction and for leadership activities connected with instruction." 3

William L. Cunningham, who studied teacher turnover in selected districts of New York State, was particularly concerned with interpersonal effects caused by staff turnover. According to Cunningham, the superintendent who is faced with the problems of replacing a large number of teachers must become involved in a heavy load of correspondence, recruiting trips, and personal interviews. For the principal, replacement of teachers necessitates orientation of new staff members to routines and procedures as well as close supervision and evaluation of teachers'



libid., p. 9.

<sup>&</sup>lt;sup>2</sup>As cited by Jo House, "IEA Sanction Causes Recruiting Problems," <u>Idaho State Journal</u> (Pocatello, Idaho), July 16, 1968, p. 1.

Maurice J. Ross, "Teacher Turnover, 1967-68,"

Research Bulletin No. 5, Series 1967-68 (Hartford: Connecticut State Department of Education, April, 1968), p. 2. (Multilithed.)

performance. The staff must establish new friendships and professional relationships. The pupils must adjust to new personalities, new expectations, and unfamiliar teaching methods. Parents are concerned because a new teacher means a relationship which may or may not be beneficial to their children. The community also must react to teacher turn-over by increased efforts to acquaint new staff members with its facilities, activities, and traditions. Public relations may suffer as a result of the community's lack of confidence in a school district which consistently loses a high percentage of teachers.

A serious effect of teacher mobility is the necessity for issuing "letters of authorization," or "emergency substitute certificates" to people not fully qualified as teachers. Even though, as in the state of Washington, "emergency substitute certification is authorized only . . . when a qualified and regularly certified teacher is not available and when teaching position is essential," the result is lowered status and morale for teachers.

In the Pocatello, Idaho, School District many of the Fall, 1968, vacancies were filled with qualified persons, but according to Superintendent Ellis, many positions still may ultimately be filled by persons not possessing full qualifications. Where positions could not be filled, Ellis feared that some classes would have to be dropped on the secondary level and class load increased on both secondary and elementary level. "Under these conditions I believe that the quality of education will deteriorate in the Pocatello schools during the next school year," Ellis said. 3

The NEA Research Division examined nearly a dozen teacher turnover studies and reported on them in a research memo issued in August, 1960. Data from the studies indicated that the greatest loss of teachers occurs in the first three to four years of teaching. This information implies



lwilliam L. Cunningham, "A Study of Teacher Turnover in Selected Districts of New York State" (unpublished Doctoral dissertation, Teachers College, Columbia University, 1959), pp. 9-10.

<sup>&</sup>lt;sup>2</sup>Iouis Bruno, "Teacher Supply and Demand in Wash-ington 1965-66," A report of a study directed by the State Superintendent of Public Instruction (Olympia, Washington), p. 11, Table XII. (Multilithed.)

<sup>3</sup>House, <u>op. cit.</u>, p. 1.

<sup>&</sup>quot;Some Why's and Wherefores of Teacher Turnover, Research Memo 1960-24 (Washington, D.C.: NEA, August, 1960), p. 2.

two conclusions: first, teachers are leaving whose comparatively recent education equips them for up-dating the subject matter and methods of the schools; and, secondly, districts tend to lose teachers who, having served an "apprenticeship," are in a position to offer experienced leadership.

It is not, however, only the "new" teachers who leave their positions. Teachers of long experience also withdraw. In Californía, over a nine year period, nearly thirteen percent of those who left the state had ten years or more teaching experience. This represents a serious loss to the schools involved.

Transferring teachers, though they do not affect the total nationwide teacher supply, do affect the supply and demand in individual school districts. States and districts appear to compete on a regional basis with each other, generally on the basis of salary, for the limited supply of experienced teachers. The ratio of teachers making intrastate changes to those making interstate changes varies from state to state. In several states studied by the NEA Research Division, intrastate movement was greater.<sup>2</sup>

#### According to Cunningham:

Some educators contend that a certain amount of turnover is desirable; that new teachers bring fresh ideas and renewed vigor to a district. To others, however, this contention loses much of its logic when defended in light of the dollar and cents expended in recruiting, employing, and orientating a new teacher, plus the time and energy consumed in making him an integral part of the staff.<sup>3</sup>

Cunningham's analysis is most appropriate considering that there has not been an adequate supply of qualified elementary school teachers since the World War II era. Further, it has been since that period of time that elementary school teachers have been generally placed, for the most part, on single salary schedules—a pay mechanism which their secondary school counterparts have long had. Traditionally elementary school teachers have been paid less in salaries than other teachers. A continued shortage in the elementary teacher field will certainly cause a high degree of mobility among those teachers who can and are willing to move to districts with higher salary schedules and better teaching conditions. Thus, a continued cycle of teacher mobility. 4



<sup>&</sup>lt;sup>1</sup><u>Ibid</u>. <sup>2</sup><u>Ibid</u>. <sup>3</sup>Cunningham, <u>op. cit</u>., p. 10. <sup>4</sup>The writers do not wish to discuss the aspect of providing merit increments for short supply teachers, or to

#### II. EXTENT OF TEACHER MOBILITY

## National Studies

In 1963, the U.S. Office of Education published the results of a nationwide teacher turnover survey which concerned the 1959-60 school year. Since that time the USOE has not completed any further teacher mobility studies, therefore reliable data showing the extent of teacher turnover for the United States since 1960 are now almost impossible to locate.

The national reports which are available for the decade of 1957-66 reveal the following information. In comparing the turnover of 1959-60 with that revealed by their 1957-58 study, the USOE investigation found that on a nationwide basis gross separations had dropped from 17.0 to 13.4 percent.<sup>2</sup>

In 1965 the National Education Association's Research Division stated:

Some sampling studies of teacher turnover have set the percent of annual withdrawals from service as high as 10.9 percent, but the Research Division's recent estimates are a more conservative 8.5 percent—the loss before next September (1965) of some 175,000 members of the 1964-65 staff.3

From the data reported in the NEA's study, it may be inferred that the national minimum mobility rate for teachers fell between 8.5 and 10.9 percent of the total teaching force. These minimum figures, however, were based on withdrawals from teaching. The national teacher turn-over rate for 1964-65 would be higher. The reader is cautioned to note that the NEA's analyses are based on Lindenfeld's data for 1959-60.

raise their salaries to attract more people as Kershaw and McKean have discussed. The reason for our omission is due to lack of time, since the topic would demand a thorough treatment.

Donald C. Orlich, "Idaho Teacher Turnover: 1965--A Selected Analysis of the Problem," The Journal of Teacher Education, XVIII, No. 4 (Winter, 1967), 447.

<sup>2</sup>Frank Lindenfeld, Teacher Turnover in Public Elementary and Secondary Schools 1959-60, Office of Education, U.S. Department of Education, Circular No. 675 (Washington, D.C.: USGPO, 1963), pp. 12-16.

3Teacher Supply and Demand in Public Schools, 1965, Research Report 1965-R10 (Washington, D.C.: NEA, 1965), p. 29.



An NEA Research Bulletin published in December, 1966, stated:

It is assumed that 8.0 percent of the number of full-time teachers in 1965-66 have left the profession.

A special survey of persons responsible for teacher education and certification in state departments of education shows that widespread shortages of qualified teachers were observed in early September 1966. Of the thirty-nine states having sufficient information to make a valid appraisal, thirty-one reported having some or substantial shortages of qualified applicants for teaching position vacancies.2

The estimated supply compared with the estimated demand for beginning teachers in 1966 indicated that there would be a critical shortage in the elementary school and a selective shortage in the secondary school.<sup>3</sup>

# Statewide Studies

A number of statewide teacher turnover studies have been conducted. Some of these studies have been the subjects of graduate theses; others have been sponsored by State Departments of Education. The following is a summary of selected findings of several recent state studies regarding the extent of teacher turnover.

Alaska. Overstreet surveyed three hundred teachers in Alaska Rural, On Base, District, and Bureau of Indian Affairs Schools who indicated in the spring of 1960 that they would not return to their 1959-60 positions. The overall rate of teacher turnover in Alaska for 1959-60 was found to be 34.2 percent. By class of schools the rates were: Rural, 47.5 percent; Alaska On Base, 46.9 percent; District, 26.3 percent; and Bureau of Indian Affairs, 42.8 percent.

l''A New Look at Supply and Demand," <u>NEA Research</u>
Bulletin, XLIV, No. 4 (December, 1966), 118.

2Ibid., p. 122.

3Ibid., p. 119.

William D. Overstreet, "A Survey and Analysis of the Reasons Teachers Gave for Leaving Their Positions in Alaska in 1960" (unpublished Master's thesis, Department of Education, University of Washington, 1960), pp. 42-43. (Rural schools were those schools drawing their students from isolated farms and villages. On Base schools served the families of servicemen at military installations. District schools were those established in cities. Bureau of Indian Affairs schools were those operated by the government and serving Indian and Eskimo families.)

"Of those teachers leaving their positions at the close of the 1959-60 school year 36.3 percent had been in Alaska one year, 24.3 percent had served two years in the state, and 14.7 percent had three years in Alaska," stated Overstreet.

In other words, of the three hundred teachers leaving their positions, slightly more than three-fourths of them had served three years or less in Alaska schools. Teaching in other Alaska schools was planned by 31.3 percent of the turnover teachers. Those who planned to teach in a different state or overseas comprised 30.3 percent of the group.<sup>2</sup>

Connecticut. In April, 1968, the Connecticut State Department of Education reported a 14.8 percent turnover among the 27,977 full-time classroom teachers in the Connecticut public schools. During each school year between the Fall of 1960 and the Spring of 1966 teacher turnover had been slightly over 13 percent. In 1966-67, however, turnover dropped to 9.7 percent. It rose again to its highest point in a decade in 1967-68, i.e., 14.8 percent. Turnover in secondary schools exceeded that in elementary schools by 2.3 percent. New or inexperienced teachers accounted for 56.2 percent of the new appointments.

Department of Public Instruction in a report titled "Teacher Mobility" indicated that in 1966-67 terminations among professional educational personnel in Delaware schools totaled 912. Of this number, 421 were elementary school teachers, 411 were secondary school teachers, 68 were other instructional personnel, and 12 were administrators. The 912 people who left their positions in 1966-67 equalled 17 percent of the 5,372 professional personnel employed in the public schools.

Kentucky. According to a Kentucky State Department of Education report, the teacher turnover for that state for the 1964-65 school year amounted to seven percent of the entire instructional staff of 28,748 full-time professionally certified personnel. A total of 2,004 teachers



<sup>&</sup>lt;u>Ibid.</u>, p. 43. 2<u>Ibid</u>.

Maurice J. Ross, "Teacher Turnover, 1967-68,"

<u>Research Bulletin No. 5</u> (Hartford: Connecticut State Department of Education, April, 1968), pp. 2-3. (Multilithed.)

<sup>&</sup>lt;sup>4</sup>Delaware Department of Public Instruction, "Teacher Mobility" (Dover, Delaware, March, 1968), p. 1. (Multilithed.)

resigned their positions. 1

New Hampshire. In 1967-68, the teacher turnover in the state of New Hampshire totaled 1,449, or 27 percent of the teaching staff. This was the highest turnover percentage reported in New Hampshire in a nine year period.<sup>2</sup>

New Jersey. Annually the New Jersey State Department of Education reports on public school teacher turnover. The number of teachers leaving their 1959-60 positions totaled 7,234. In 1960-61 the number had increased to 7,464. The percent of total turnover, however, was not reported. During each of the two years, 1959-60 and 1960-61, approximately 25 percent of the turnover teachers accepted teaching positions in other New Jersey public schools. Those accepting teaching positions outside New Jersey were approximately nine percent of the total turnover each year. 3

Oregon. In March, 1963, the Oregon Education Association issued a research bulletin entitled "School Personnel Turnover in Oregon 1961-62 to 1962-63." Of the 18,960 teachers employed in Oregon schools during the 1961-62 school year, 3,218 or 17.0 percent did not return to their positions in the fall of 1962.4

In Oregon, "A total of 3,310 educators did not return to their 1964-65 positions in 1965-6. There was a 15 percent turnover in teachers and a 10 percent turnover in school administrators," stated a 1966 report on staff mobility.

Tennessee. In 1962 and 1963, the Tennessee Education Association published annual compilations of data concerning teacher turnover. The studies revealed that in 1960-61, the turnover in the state was an estimated 10 percent;

1 S. Kern Alexander, George Rush, and Mary Figg, Teacher Turnover Study, 1966 (Kentucky: Division of Statistical Services Bureau of Administration and Finance, Kentucky Department of Education, 1966), p. 11. (Multilithed.)

<sup>2</sup>Newell J. Paire, "Teacher Needs Survey, 1967-68," A report to the Administrative Staffs of New Hampshire, Department of Education, (August 29, 1967), p. 3. (Multilithed.)

<sup>3</sup>National Education Association, Research Division, "Teacher Turnover and Teacher Loss," Research Memo 1963-17 (Washington, D.C.: NEA, July, 1963), p. 3.

40.E.A. Research Bulletin, XXII, No. 4 (Portland, Oregon, March, 1963), p. 2. (Multilithed.)

50regon State Department of Education, Division of Administrative Services, Research Section, "Reporting Research" (Oregon State Department of Education, March, 1966), p. 3. (Multilithed.)



in 1961-62, 11.6 percent. In both years about 5 percent of the state's classroom teachers were "lost to Tennessee."

Utah. The 1960 study of the loss of teachers from Utah classrooms indicated that the rate was about 12 percent of the total number of teachers. In 1961, turnover among Utah professional personnel equalled 10.97 percent, and in 1962, 8.94 percent. In 1963, it rose to 11.49 percent. During the following three years, 1964, 1965, and 1966, teacher mobility percentages were, respectively, 8.97, 8.86, and 9.86.3

Granite district, the largest school district in Utah, which adjoins Salt Lake City and employing a total of 2,465 personnel, reported a 1966-67 turnover of 13.8 percent. Salt Lake City, the next largest district in the state had 18.5 percent turnover. The highest percentage, 27.3, was reported by the small district of Park City (22 staff members), east of Salt Lake City.4

Washington. According to the annual report, "Teacher Supply and Demand in Washington State," 4,989 public school teachers left their 1966-67 positions. This equalled a 12.4 percent turnover rate. Five hundred eighty-three of these experienced Washington teachers accepted teaching positions in other states. One thousand three hundred fifty changed districts within the state. 6

West Virginia. In a summary of a "Teacher Dropout Study" conducted by the West Virginia State Department of Education, it was noted that 2,484 teachers left their 1967-68 positions in that state. Since the number of

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National Education Association, Research Division, "Teacher Turnover and Teacher Loss," Research Memo 1963-17 (Washington, D.C.: NEA, July, 1963), pp. 4-5.

<sup>2</sup>National Education Association, Research Division, "Teacher Turnover and Teacher Loss," op. cit., p. 5.

<sup>&</sup>lt;sup>3</sup>Utah State Board of Education, "Status of Teacher Personnel in Utah, 1966-67" (Salt Lake City: Utah State Board of Education, No Date), p. 38, Table 31. (Multilithed.)

Ibid., p. 39, Table 32. (Park City, it should be noted, has excellent winter sports facilities—especially for skiing. Perhaps free seasons ski passes and a heavy recruitment effort among "ski" colleges and universities might be made.)

<sup>&</sup>lt;sup>5</sup>Louis Bruno, "Teacher Supply and Demand in Washington 1967-68," A report of a study directed by the Washington State Superintendent of Public Instruction, p. 1, Table I. (Multilithed.)

<sup>6&</sup>lt;u>Ibid.</u>, p. 10, Table XII.

instructional staff for the same school year was 18,282, the percentage of turnover among West Virginia teachers for 1967-68 was 13.6.1



## Summary of Possible Mobility in Selected States

In an attempt to establish baseline data concerning teacher turnover among the fifty states, a brief one page questionnaire was mailed to each of the State's superintendents of public instruction. In several cases, the respondents supplied us with a survey of teacher turnover for that state. In others, figures were provided to establish indicative data about the magnitude of teacher mobility. The information requested was not adequate enough to determine a national mobility figure, but we were able to calculate an indicative figure which illustrates the number of and percent of full-time certificated employees (or full-time equivalents in some cases) for the school years of 1966-67 and 1967-68. Thirty-four states supplied data that could be analyzed.

The rationale behind Table 3-1 was that if we could determine the number of teachers who were new to their positions in the 1967-68 school year, we might establish a "best guess" or indicator about the percent of teacher mobility. By subtracting the number of new positions in the 1967-68 school year, the school population growth factor over 1966-67 would be omitted from the calculations.

The major fault of our logic was that it did not account for intradistrict mobility. That is, a teacher who taught in grade six might move to a junior high school in the same district and thus be classified as "new to the position." Yet, even with this logical flaw we can infer that the respective states could have a teacher turnover percent that might equal or surpass that figure listed in column nine. In the absence of accurate data about the national teacher turnover rates, these "best guesses" are justified. As each state begins to determine its own teacher mobility and begins reporting to a central collection agency, exact data will be available for comparative purpose.

Assuming the logic to be valid and the data to be indicative it can be observed that the percent range for states having teachers new to their positions for the 1967-68 school year were: Nebraska with a low of 3.9 percent (which is very surprising in light of the large numbers of



Data were supplied by the State Department of West Virginia, Charleston, to the study team via a photo copy of a summary of West Virginia teacher turnover. No date, page or source was stated.

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TABLE 3-1

ERIC ACTUAL TO PROVIDE TO PROVIDE THE PROVIDENCE OF THE PROVIDE OF THE PROVIDE OF TH

AN AITEMPT TO DETERMINE THE NATIONAL TEACHER MOBILITY RATES BETWEEN THE 1966-67 AND 1967-68 SCHOOL YEARS

	1	2	က	4	S	9	7	80	6
	State	Number of Full-Time Certified Personnel 1966-67	Number of Full-Time Certified Personnel 1967-68	Gross Gain or Loss Between 1966-67 and 1967-	Number of New Posi- tions in 1967-	Number of Certified Personnel New to Their Positions in 67-68 School Year	Difference Between Those New to Their Positions in 67-68 and New Positions in 67-68	Number of Full-Time 1966-67 Certificated Personnel (Fig. Derived col.7/col.2)	Percent New to Positions
-49-	Alabama Alaska Arizona Arkansas	33,189 3,440 16,704.41 19,729	33,911 3,549 N/R* 20,191	722 109 462	722 109 N/R 462	12,530 671 N/R N/R	11,808 562 N/R	11,808/33,189 <sup>8</sup> 562/3,440 N/R	35.6 16.3
	California Colorado Connecticut <sup>C</sup> Delaware	196, 439 <sup>b</sup> 24, 442 26, 569 5, 531	15,646 25,313 27,977 5,697	15,646 871 1,408 166	15,646 N/R 1,408 166	53,046 2,452 5,345 1,072	37,400 1,581 3,937 906	57,400/196,539 1,581/24,442 3,937/26,569 906/5,531	19.0 6.5 14.8 16.4
	Florida <sup>d</sup> Georgia	58,366 45,052	60,295 46,079	1,929	1,929 1,027	14,186e 5,079	12,257 4,052	12,257/ 58,366 4,052/ 45,052	21.0

\*N/R implies that the given state gave no response for the item asked for.

\*AThis figure does not include teachers employed by the Bureau of Indian Affairs which operates approximately 85 rural type schools in Alaska.

\*DEstimations.

Conly full-time classroom teachers have been reported. eCould include some returning to teaching.

dEstimations.



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G	52,	98,	1 N -	ຕ ⊢	99	910	768/ 7,570 1,256/ 8,095	10.1
Idaho Illincis Indiana	8,033 94,073 51,714.96	95,041 53,833.10	2,118.14	N/R 2,118.14	N/R 4,474.27	N/R 2,356.14	N/R ,356.14,	6 4.6
Iowa Kansas	5,000 9,818	5,100 1,680	95	88	9, 9,	0.00	,500/29,81 ,825,4/35	• •
	35, 860. 3 29, 864 10, 815	6,91 N/R 0,87	L, 034.0 N/R 59	1,1 N N N N N N N N N N N N N N N N N N N	N/R 173	N/R 114	N/R ,114/10,815	•
Maryland	88,	37,931	3,047	3,047	4	, 43	,437/34,88	
ssach	48,180 N/R	20,406	2,226	2,326	11,614	9,288	9,288/48,180	19.3
nnes ssis ssou	41,533 43,1480 43,149	25,740 44,265	1,260	1,200	3,400	2,200 8,578 8,8	2,200/24,480 8,578/43,149 N/R	8.9 19.9
Mont Nebr	, 51 15,	y 0, 6		<u> </u>	/ コレ	<u>, 27</u>	, ,,	15.9
vada w Hamp w Jers	-	) <u>- Z</u>	N/R		, 85	ব	49/ N/R	
ew Mexico ew York orth Caro	158,580 51,047	171,157 52,853	12,577	11,530 N/R 315	9,916	2,017	9,916/158,580 2,017/51,047 652/ 8,931	 
Dakot	y 0 y 0	,77	10 ]	10	າ ຕ	63	38/98,96	• 1

Includes part-time personnel.

**SApproximation.** 

hThis percentage of turnover figure came from the New Hampshire pamphlets and information and is not our computation.

	_	8	ന	4	Ŋ	9	7	œ	6
' `	1 (	6	1 1	782	· \	Ο,	-1	1,511/26,818	5.6
	okianoma Oregon Pennsylvania	23,500	24,000	500 2,391	500 2,391i	N/R 13,647i		N/R 11,256/101,853	11.0
	Rhode Island	,06	8,859 N/R	390 N/R	N/R N/R	N/R 3,578	N/R N/R	N/N R/R	
- •	Dakota Ssee	9,045 35,347	9,356	311	300	N 4 4	<b>\ 0</b>	N/R 2,729/35,347	7.7
	kas ah mon	N/R 12,717 4,790	13,157 5,656	998 866	998 866	2,596 N/R	2.156 N/R	2,156/12,717 N/R	11.3j
-	Virginia	, 10		N/R	N N	0	Z	N/K	
51	Washington West Virginia	34,961k 18,100	36,971 18,282	2,010	6,361 182	6,361 2,206	4,351 2,024	4,351/34,961 2,024/18,100	11.2
	Wisconsin Wyoming	38,030 4,310	40,234	2,204	2,0001 N/R	6,0001	1,058	4,000/38,030 1,058/4,310	10.5 24.5

inis percentage figure is quoted from Utah information given us and is not cur own <sup>1</sup>Estimations. computation.

kwashington figures derived from information contained in Louis Bruno, "Teacher Supply and Demand in Washington, 1967-68," A report of a study directed by the State Superintendent of Public Instruction, Olympia, Washington, 1968, p. 1, Table 1. (Multilithed.)

lEstimations.

Sources: Letters and publications from the respective State Departments of Education. very small sized school districts which traditionally have had excessive turnovers) to a high of 35.6 percent in Alabama. The median figure was 11.1 percent. Thus, one-half of the 34 reporting states show that the percent of certificated employees new to their positions in 1967-68 exceeded 11.1 percent, while one-half fell below the 11.1 percent figure.

Table 3-2 presents a summary of teacher mobility for reporting states as previously discussed in this chapter. By comparing the actual statewide teacher mobility with the data in Table 3-1 (where comparable data exist), the reader will observe some rather close parallels between the reported turnover percentages and the percents computed in column 9 of Table 3-1, "Percent New to Positions."

By taking the median of the most recent eleven reported figures in Table 3-2, we obtained a median teacher mobility figure of 14.8 percent. Obviously, we cannot generalize to the nation. However, a reasonable inference would lead us to speculate that the national teacher mobility rate would be in the proximity of at least 15 percent. Future investigators will be able to test our prediction.

## Sistrict Studies

Cook County, Illinois. In the March 10, 1968, issue of Chicago's Sunday American, Wesley Hartzell reported that among Cook County high school districts the 1966-67 school year teacher turnover rates ranged from a low of seven percent to a high of 28.3 percent.

Pocatello, Idaho. In a report to the Board of Trustees of the Pocatello School District on July 15, 1968, Superintendent of Schools Rulon Ellis said, "Resignations, retirements, and leaves of absence since April 1 have thus far created 131 vacancies in the Pocatello school system for the 1968-69 school year." This figure, Mr. Ellis pointed out, represents turnover in excess of 23 percent.

What causes the mobility among teachers? Section III will attempt to analyze reasons for the data presented in Section II.

Wesley Hartzell, "How Ideal Is Your Suburb School?" Chicago's Sunday American, LXXXVII, No. 44 (Chicago, March 10, 1968), Section 1, p. 1.

Jo House, "IEA Sanction Causes Recruiting Problems," Idaho State Journal (Pocatello, Idaho, July 16, 1968), p. 1.

TABLE 3-2
SUMMARY OF TEACHER MOBILITY FOR REPORTING STATES DURING SELECTED YEARS

State	Percent of Teacher Mobility	Reporting School Year
Alaska	34.2 %	1959-60
Connecticut	14.8 13.0 (average)	1966-67 1960-66
Delaware	17.0	1966-67
Idaho	16.5 16.5 (average)	1966-67 1954-67
Kentucky	7.0	1964-65
New Hampshire	27.0	1967-68
<b>Oregon</b>	15.0 17.0	1964-65 1962-63
Tennessee	11.6 10.0	1961-62 1960-61
Utah	9.86 8.86 12.00	1965-66 1964-65 1959-60
Washington	12.4	1966-67
West Virginia	13.6	1967-68

Sources: See text and footnotes, passim, Chapter 3.

### III. APPARENT CAUSES OF TEACHER MOBILITY

The traditional approach to a study of teacher mobility is an attempt to explain why some schools have high turnover and others have low turnover. However, as W. W. Charters, Jr. has pointed:

Since turnover rates from school to school vary, investigators have been encouraged to look for determinants of them in differential attributes of the schools—in teaching load, salary schedules and fringe benefits, tenure provisions, community provincialism, or other conditions of work in the districts from which teachers depart.1

It is this traditional approach which has been employed by the turnover reports reviewed for this study. Consequently, the following discussion will attempt to identify causes of turnover as they relate to conditions of work. For a broader perspective of teacher mobility, the reader is encouraged to read Chapter 2 of this study in which career patterns and general occupational mobility are discussed.

## National Studies

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The U.S. Office of Education (USOE) turnover survey for 1959-60, the latest national study available, collected information on teacher separations in terms of administrative categories rather than in terms of teachers' reasons for leaving their positions. Each separation was classified into one of the following groups: On leave of absence; Retired; Deceased; Changed to nonteaching job in same district; Other, not classified above. Only in the case of teachers who died do the categories show a cause of turnover, since those who retired may re-enter teaching in another district.

Of the 193,200 classroom teachers who were separated from public school systems during the 1959-60 school year, 8.6 percent were on leave of absence; 8.4 percent retired; 1.6 percent were deceased; 12.6 percent were dismissed; and 3.1 percent changed to a nonteaching job in the same district. "Other separations," a category which included

W. W. Charters, Jr., "Some Obvious Facts About the Teaching Career," Educational Administration Quarterly, III (Spring, 1967), 190.

Lindenfeld, op. cit., p. 5.

teachers who left the profession and those who transferred to other school districts, accounted for 65.5 percent of the national turnover. Women were more likely to leave the profession by going on leave of absence or retiring than were men. Men were more likely to be dismissed or to change to a nonteaching job in the same district.

The USOE survey found some evidence of an inverse relationship between teacher turnover and the size of the school districts. Lower rates of turnover were found in large school districts and higher rates in small districts. The size-turnover relationship is more marked among men than among women. The difference between the separation rate in the largest and smallest districts in 1959-60 was approximately 2 percent among the women. It was almost 13 percent among the men teachers.<sup>2</sup>

According to the U.S. Office of Education survey:

Factors which may contribute to the greater holding power of the large school systems include working conditions and administrative considerations. The salary level tends to be higher in the large systems.

. . . Further, it seems more likely that a teacher could be placed in a job most suited to his capabilities and interests in a large rather than in a small school system. Problems in a small system that could be solved only by a transfer to another school system might, in a large system, be solved by a transfer within the system . . [also] women teachers are likely to leave their own jobs to follow their husbands if and when the husbands change jobs. But in large metropolitan areas a change in job is less likely to involve a move to another city.

Factors which did not appear to be consistently related to separation rate at the national level included average salary paid, pupil-teacher ratio, growth in enrollment, the relative number of men and women on the staff, and the level of experience of the teaching staff. 3

The 1966 NEA Research Bulletin, "A New Look at Teacher Supply and Demand," discusses causes of turnover briefly:

Increased demand for faculty personnel in higher education, enlarged programs related to public education, expansion of federal government-related placement of teachers (e.g., programs for pre-school children,

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<sup>1</sup> Ibid., p. 11, Table 6. 2 Ibid., pp. 10 and 18.
3 Ibid., p. 14.

military), and increased attractiveness of opportunities for college graduates in other occupations probably are influencing the supply and demand conditions. . . .

Some reasons closely related to those listed by the NEA for the reduction in the number of teachers were stated by Orlich in 1967 when he stated that, "The recent funding of federally supported education programs, such as the Job Corps, Regional Education Laboratories, the National Teacher Corps, and the creation of lucrative positions with Title III of ESEA have further reduced an already short supply of qualified teachers."<sup>2</sup>

### Statewide Studies

Alaska. Overstreet's survey of teachers leaving their positions in Alaska in 1960, found that among Rural teachers the apparent causes of turnover were isolation of community, dissatisfaction with community, inadequate housing, inadequate salary, limited opportunity for advancement, and dissatisfaction with school facilities.

Alaska On Base teachers listed as their reasons for leaving their positions desire to travel, transfer of spouse, inadequate housing, isolation, inadequate salary, dissatisfaction with community and weather.

District teachers left their positions in Alaska schools due to inadequate salary, the weather, desire to undertake graduate study, inadequate housing, limited opportunity for advancement, and isolation.

Teachers in Bureau of Indian Affairs schools listed limited opportunity for advancement, the high pupil-teacher ratio, dissatisfaction with the principal, inadequate salary, and isolation as their reasons for leaving their positions.<sup>3</sup>

Two of these apparent causes of turnover--isolation of community and the weather--appear to be peculiarly Alaskan in nature.

Connecticut. Data concerning the reasons why teachers left their positions were not collected for the



<sup>1&</sup>quot;A New Lock at Teacher Supply and Demand," op. cit., p. 119.

Orlich, "Idaho Teacher Turnover: 1965--A Selected Analysis of the Problem," op. cit., p. 447.

<sup>30</sup>verstreet, op. cit., p. 44.

Connecticut State Department of Education report on teacher turnover in Connecticut, 1967-68.1

The largest number of Delaware teachers Delaware. who terminated employment following the 1966-67 school year (160 of 912) accepted educational positions or public school employment elsewhere in Delaware. One hundred thirty-nine of the 912 accepted educational positions in another state or country. A limited number (23) accepted nonpublic school employment in Delaware. Ten accepted positions with the State Department of Education or with colleges or universities in Delaware. Though these figures account for what slightly more than one-third of the turnover teachers did the following year, they do not explain why those leaving their positions decided to do so. The 580 teachers not included above left for various reasons. One hundred twenty-one dropped out of teaching due to health and family reasons, including maternity. Other reasons, in descending order of importance were: leave of absence, voluntary retirement, husband transferred, left education for other types of employment, administrative action, marriage, graduate study, abolition of job, failed to meet certification standards, deceased and armed services.2

Kentucky. Economic factors were listed as the main recon for turnover among Kentucky teachers. Teachers who moved out of the state reported salary gains of approximately \$1,800. Teachers who moved within the state averaged approximately \$500 gains. Other major reasons for turnover were a discouraging future outlook and unsatisfactory working conditions.

New Hampshire. The three main reasons why New Hampshire teachers left their 1966-67 teaching positions were as follows: approximately one-fifth moved to an out-of-state public school; slightly less than one-fifth moved to another New Hampshire district (again, these two reasons indicate direction of move, not cause); still fewer left because of family reasons; approximately one-teach retired. Other reasons affecting only small numbers of teachers were formal study, service terminated by Board, change to non-school employment, health, change to nonpublic school employment, death, expired or revoked credentials.

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TRoss, loc. cit.

<sup>&</sup>lt;sup>2</sup>Department of Public Instruction, Research Division, "Teacher Mobility," op. cit., p. 1.

<sup>3</sup>Alexander, op. cit., p. ii.

<sup>&</sup>lt;sup>4</sup>Paire, <u>op. cit</u>., p. 3.

New Jersey. Approximately one-fourth of New Jersey's turnover teachers had moved to another public school district within the state at the close of both the 1959-60 school year and the 1960-61 school year. Nearly 9 percent moved to districts outside New Jersey both years. reasons for transfer were not sought. Marriage or home duties were the reasons for which the largest percentage of teachers left their positions both years, with 25.3 percent leaving in 1959-60, and 27.1 percent leaving in 1960-61. Retirement or death claimed 14.8 percent in 1959-60 and 10.6 percent in 1960-61. Leaves of absence for maternity were granted 7.3 percent of the turnover teachers both years. Accepted employment other than teaching was the reason resulting in slightly more than 7 percent of the New Jersey turnover for each of the years reported. Small percentages left their positions each year to accept administrative positions within the district, to teach elsewhere than in public school systems, or for leaves of absence for reasons other than maternity.1

Oregon. Reasons given for certified personnel not returning to their 1965-66 positions during the 1966-67 school year in the Oregon public schools included:<sup>2</sup>

A position was taken in another district in Oregon	36.7%
A position was taken in another district in another state	16.3%
Left position without plans to seek other employment (Not Retired)	13.7%
Retired	9.3% 8.4% 8.0%
of education	4.5% 1.8% 1.2% 99.9%

Tennessee. The reason most frequently given by teachers for leaving Tennessee school districts was acceptance of a teaching position in another system. Twenty-one percent of the turnover teachers gave this reason in 1960-61, and 25.4 percent gave it in 1961-62. Again, however,

l. Teacher Turnover and Teacher Loss, op. cit., p. 3.

20regon State Department of Education, op. cit.,
p. 3.

as in studies reviewed from other states, the <u>causes</u> of the teachers going to other districts were not solicited. Next in importance as a reason for leaving was leave of absence, which in both years totaled slightly more than 15 percent. "Became a full-time homemaker," was the reason given by 10.3 percent in 1960-61 turnover, and 12.9 percent in 1961-62. Ten percent of 1960-61 turnover was due to transfer of spouse. In 1961-62 this cause accounted for 11.8 percent. Retirement, dismissal, acceptance of positions in fields other than education, were the other major reasons given both years by teachers who left their positions in Tennessee.

Utah. Utah turnover teachers indicated that their major reason for leaving their positions during the summer of 1960 was the need to assume home responsibilities. Next in importance were the inadequate salaries paid to Utah teachers. The typical salary increase for those teachers who changed within the state was \$1,312. Those going to other states to teach gained approximately \$1,291. For those entering other occupations the "typical" increase was \$2,004.

Besides home responsibilities and inadequate salaries, the chief reasons given by Utah teachers for leaving their positions were family moves, inadequate salary potential, desire for new experience, excessive class size, and shortage of teaching materials. Many reasons for leaving concern community factors: lack of recreational or social contacts, unsatisfactory housing, unsatisfactory relations with students and parents, and excessive extracurricular work.<sup>2</sup>

A different and more positive approach to teacher mobility was utilized by the Utah State Board of Education in its 1966-67 report on Utah teachers. Rather than asking teachers who were leaving their positions why they were doing so, the investigators asked teachers new to Utah why they came. Their reasons, not in order of importance, included: to make or re-establish home in Utah, home already in Utah, better educational opportunities or position, church affiliation, climate, higher salary, better living conditions, spouse returned for more schooling, personal reasons, family reasons. Perhaps these positive reasons

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<sup>1&</sup>quot;Teacher Turnover and Teacher Loss," op. cit., p. 5, Table 5.

<sup>&</sup>lt;sup>2</sup>Ibid., pp. 5-6.

Utah State Board of Education, op. cit., p. 150, Table 137.

for teacher mobility might have significance for the five states—California, Idaho, Arizona, Nevada, and Oregon!—which supplied the majority of the teachers new to Utah.

Virginia. The two major causes of resignations and changes in positions among instructional personnel in Virginia in 1967-68 were marital responsibilities (including marriage, household duties, or maternity), and transfer of husband to another location. Other reasons for resignations were, in descending order of importance, the acceptance of a teaching position in another state or private school in Virginia or another state, retirement, private employment, illness, unsatisfactory service, death, replacement by certified teacher, and military service.<sup>2</sup>

Washington. A summary of teacher turnover in Washington for the 1966-67 school year lists the following causes and percentage of turnover teachers affected by each cause. 3.

Teaching in other Washington distric	cts	3.	•	. 20 . 8%
Teaching outside state	•	•	•	. 9.0%
Otherwise occupied:				00 69
Homemaking	•	•	•	.23.6%
Other occupation	•	•	•	.12.9%
Attending school	•	•	•	. 8.4%
Armed services				3%
		_		10.3%
Retired	•	•	•	3 2%
	•	•	•	. 3.2%
No information	•	•	•	11.5%
Total .	•	•	•	100.0%

West Virginia. The "Teacher Dropout Report 1967-68" for West Virginia gives the following information on causes of teacher turnover.4

Another job outside teaching field.	•	•	•	.23.0%
Teaching position in another state.	•	•	•	.10.2%
Teaching position in another county	•	•	•	.13.0%
Retirement	•	•	•	.13.0%
Attending college	•	•	•	. 5.3% 5 1%
Leave of absence	•	•	•	3.5%
Not qualified	•	•	•	. 2.0%
Unknown	•	•	•	.15.8%
Total .	•	•	•	100.1%

<sup>1</sup> Ibid., p. 152, Table 139.



<sup>&</sup>lt;sup>2</sup>State Superintendent of the State of Virginia, "Resignations and Changes in Positions Among Instructional Personnel," 1967-68, Bulletin (Virginia: Office of the Superintendent [No Date]). (Mimeographed.)

<sup>&</sup>lt;sup>3</sup>Bruno, <u>op. cit.</u>, p. 11, Table XIII. <sup>4</sup>West Virginia State Department of Education, -60-

# Teacher Withdrawals

In a paper written on "Teacher Supply and Demand," Clifford D. Foster briefly discussed selected studies related to teacher withdrawals--those who leave or quit teaching. He wrote that:

Several studies used questionnaires to analyze teacher withdrawals. Blaser (1965) attempted to discover reasons why 70 men who had entered teaching had later dropped out. The respondents placed economic factors above all reasons. W. E. Steward (1963) found that among respondents who were experienced teachers, withdrawal was most influenced by such factors as retirement, family-related factors for women, and economic factors for men. Metz (1962) analyzed 3,843 responses from a group of 4000 teachers, and concluded that the majority of men quit teaching because of low salaries, and women left for homemaking responsibilities.1

Summary of the Apparent Causes of Teacher Mobility in Several States. The statewide studies concerning teacher turnover which were reviewed for this study generally indicate that a variety of factors have influenced teachers to leave their positions during the 1960's. It is unfortunate, from the standpoint of those who seek to know actual or perceived causes of turnover, that several of the states list as reasons for turnover the transfer of teachers to other teaching or non-teaching positions within or without the state. Such an approach defines the direction of move; but it does not clarify the cause of such mobility.

Summary Sheets of the 1967-68 Teacher Dropout Study and Source of New Teachers Study (Charleston: The Department [No Date]). (Photo copy of row data.)

1Clifford D. Foster, "Teacher Supply and Demand," Review of Educational Research, XXXVII, No. 3 (June, 1967), Foster cited: John Walter Blaser, Factors Contributing to the Problem of Men Graduates from the University of Idaho (1951-1960) Leaving the Teaching Profession. Doctoral dissertation, Moscow: University of Idaho, 1965, 218pp. Abstract: Dissertation Abstracts 27:341A, No. 2, 1966. Earl Clarence Metz, A Study of Factors Influencing the Withdrawal of Four Thousand Teachers from the Ohio Public Schools and the Possibility of Their Return. Doctoral dissertation. Columbus: Ohio State University, 1962, 167pp. Abstract: Dissertation Abstracts 23:2808-2809, No. 8, 1963. Wilbur Eugene Steward, Factors Involved in the Withdrawal of Teachers Who Held the Same Position in Indiana from 1951 to 1958. Doctoral dissertation. Bloomington: Indiana University, 1963, 158pp. Abstract: Dissertation Abstracts 24: 3185, No. 8, 1964. -61-

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Chief among actual reasons given for females leaving a position was the acceptance of home responsibilities, including marriage and maternity. Transfer of spouse was also an important factor closely related to home responsibilities. The desire for increased salary was influential, but was not listed as frequently as a reason for turnover as it had been in earlier studies. This may be due to the tendency in the studies, as discussed above, to list transfer to other positions as a cause of mobility. Further, most studies did not subdivide responses into male and female categories. From previous studies conducted by the investigators, it is imperative that such sex distinctions be identified. Males and females seem to leave their teaching jobs for very different reasons. 1

## District Studies

Chicago's Sunday American, notes that the tendency toward a new teacher "idealism" which tends in some cases to negate the traditional causes of "turnover" such as salary, 2 teacher-student ratio and lack of adequate facilities. Mr. Hartzell's viewpoint has been discussed in greater detail in Chapter 2 of this study.

Pocatello, Jaho. Causes of teacher turnover for 1967-68 in the Pocatello School District are listed simply as "resignations, retirements, and leaves of absence." Mr. Rulon Ellis, Superintendent, adds, however, "We are not competitive in the teacher market place. . . . We find that the total economic package we can offer beginning teachers is from \$400 to \$1,000 less than other recruiters. . . . "4

Small Districts. Butefish's doctoral dissertation is an attempt to identify causative factors of teacher mobility in small communities. He listed the following reasons as being most influential:<sup>5</sup>

- 1. Lack of opportunity for advancement.
- 2. Low salary scale.

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Orlich, et.al., Teacher Turnover in Idaho Public Schools: 1963, and Idaho Teacher Mobility: 1965 (Pocatello: Idaho State University, 1964 and 1966).

<sup>&</sup>lt;sup>2</sup>Hartzell, op. cit., p. 1.

<sup>&</sup>lt;sup>3</sup>House, op. cit., p. 1. <sup>4</sup>Ibid.

William Lewis Butefish, "An Analysis of Causative Factors in Teacher Mobility" (unpublished Doctoral dissertation, Texas Technological College, 1967), reviewed in Dissertation Abstracts, XXVIII (Ann Arbor: University Microfilms, November, 1967), 1645-A.

3. Inadequate facilities.

4. Lack of administrative consistency.

5. Inadequate supplies.

6. Excessive extra duties.

7. Poor relationships with superintendents.

# IV. A SUMMARY OF COMMON CHARACTERISTICS DISCERNIBLE IN TEACHER MOBILITY

In part teacher turnover reflects the mobility of the American labor force which results in the movement of workers from one geographic location to another and from one kind of job to another. Transfer of teachers from one position to another in the same state is common, and generally the rate of intrastate movement exceeds the rate of interstate movement. A possible minimum derived percent of turnover for the 1966-67 school year varied among selected states from a possible low of 3.9 percent to a possible high of 35.6 percent.

Teacher mobility apparently results from a variety of causes. Among women the major causes are homemaking, maternity, and transfer of spouse. Among men, turnover tends to result from the desire for advancement and the need for increased salary. Other reasons, such as retirement, return to formal study, military service, death, and poor health account for small percentages of turnover. The increased competition by federally subsidized educational programs is a factor now influencing some teacher mobility.

It is the effect of teacher mobility upon the overall quality of education which most concerns professional educators. In order to eliminate the dissatisfaction with working conditions which frequently results in teacher turnover, and consequently adversely affects the quality of education, Hakel, Hollman, and Dunnette propose that attention be given the following factors: Teachers should be accorded the right to professional status and recognition; they should be allowed time and means to perform a manageable task; they should be given personal consideration and fair treatment; they should have available to them leadership opportunities as well as the privilege of working under competent administration; and they should receive from their work economic satisfaction and security.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>See Table 3-1.

<sup>&</sup>lt;sup>2</sup>Milton D. Hakel, Thomas D. Hollman, and Marvin D. Dunnette, "Stability and Change in the Social Status of Occupations Over 21 and 42 Year Periods," The Personnel and Guidance Journal, XLVI (April, 1968).

If those suggestions by Hakel, Hollman, and Dunnette are to be implemented, chances are that it will be through greater teacher militancy and not external sources. Further, the studies reviewed in Chapter 2 would tend to negate the speculations of Hakel, Hollman, and Dunnette.

Chapter 3 has presented some data concerning the relative rates of teacher mobility and general reasons for these rates. Chapter 4 will present demographic and other factors associated with teacher mobility.

#### CHAPTER 4

## DEMOGRAPHIC INFORMATION RELATED TO TEACHER MOBILITY

Teacher mobility in Idaho, which is the chief concern of this study, is related to and influenced by a number of social factors. In order that teacher mobility may be viewed as part of a larger context, the following discussion will deal with characteristics pertaining to teachers and the general population from which they are drawn. A general discussion also relates to the academic preparation of Idaho public school teachers.

## I. SOME GENERAL POPULATION CHARACTERISTICS PERTAINING TO TEACHERS

An inherent aspect of teacher mobility is that of demography—the study of populations. Population characteristics can best be understood through a brief review of data concerning them.

### Resident Population

Figures 3 and 4 show the percent of people within selected age groups in Idaho and the United States for 1960.1 Ages twenty through forty-nine include the great majority of employable people in a population. Most workers are drawn from these comparatively younger groups; yet, it is also true that many workers are drawn from those older than forty-nine. In general, however, the years from twenty through fortynine are optimum ages for employment. This generalization applies with particular relevance to teachers since preparation for a teaching career is seldom completed before age twenty-one and seldom begun after age forty-nine. It is this thirty year period, then, that is of importance in relation to teacher mobility, because it is from the age group 20-49 that additions and replacements for needed teachers may be drawn.

In 1960 Idaho's population within this age group, 35.86 percent, was 2.39 percent lower than that of the



<sup>&</sup>lt;sup>1</sup>The authors regret that more recent, comparable data are not available for use in similar tables for more recent years.

#### Percent

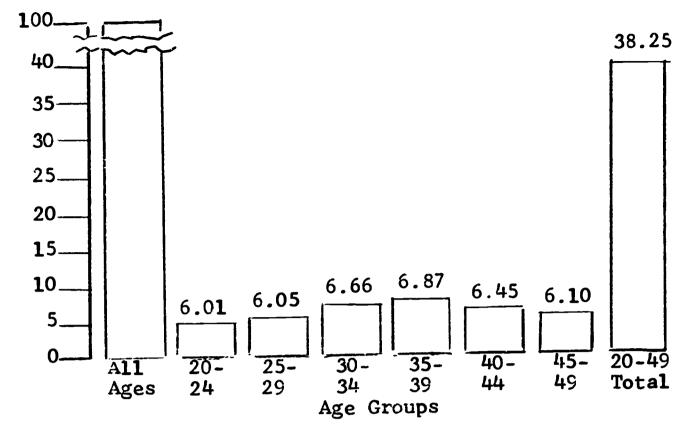


Figure 3. Percent Distribution of Population Within Selected Age Groups in the United States, 1960.

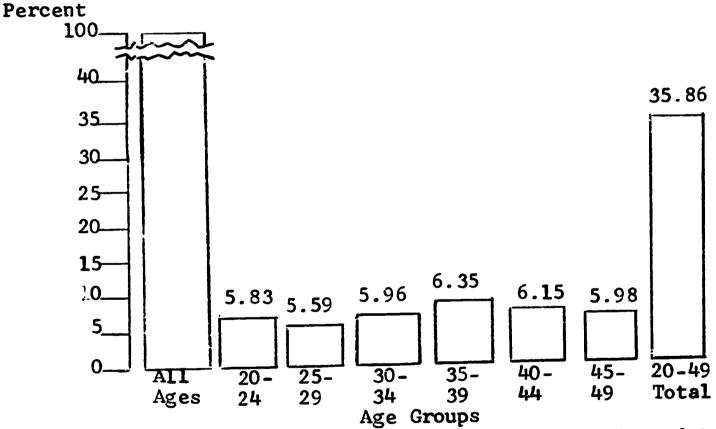


Figure 4. Percent Distribution of Population Within Selected Age Groups in Idaho, 1960.

Sources of Figures 3 and 4 respectively: U.S.

Department of Commerce, Bureau of the Census, U.S. Census of Population: 1960. Detailed Characteristics. United States

Summary, p. 1-359; Idaho I, p. 14-161.

United States for the same age group. In each of the sub-divisions within the age group, Idaho's percent of population was slightly less than that of the United States within comparable sub-divisions. This information is illustrated more clearly in Figure 5, which compares the proportion of Idaho males and females to the proportion of males and females within the United States in 1960. It is important to note that Idaho had proportionately fewer people between the ages 20-64 than did the nation as a whole. A similar difference existed in 1966 when the percent of population aged 21-64 was estimated at 49.5 for the United States and 46.7 for Idaho, a 2.8 percent difference.

Harry C. Harmsworth's detailed study of Idaho's population analyzed some of the above mentioned age characteristics. As Harmsworth stated:

This atypical character of Idaho's age structure stems from the out-migration of young adults above the age 20. The specific reasons why these young people leave Idaho could be ascertained only through rather extensive research outside the scope of the present study. It seems a safe assumption, however, that the primary reason is economic--Idaho simply does not have the number and variety of job opportunities at competitive salaries to hold its young people at home.

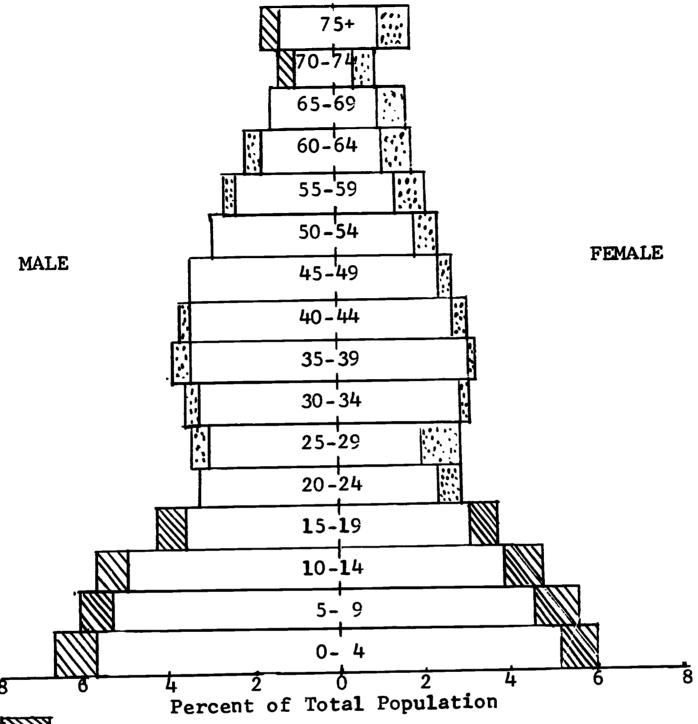
It is noticeable that Idaho, along with the Mountain States, has a lower percentage of population 65 years of age and over than does either the Pacific States or the United States. In accounting for this, it appears that a significant factor would be the out-migration mentioned above. When young adults leave the state, the large majority do not return, which has the effect of reducing the number of adults in every age interval, including that above age 64.2

Harmsworth's "safe assumption" was, indeed safe for male college graduates. A study completed in 1968 by William A. Kerns sought to identify those factors which related to the egress of University of Idaho male



National Education Association, Rankings of the States, 1968, Research Report 1968-R1 (Washington, D.C.: NEA, 1968), p. 8, Table 7.

<sup>&</sup>lt;sup>2</sup>Harry C. Harmsworth, <u>Population Trends in Idaho</u> 1950-1960, Special Research Fund Project No. 90 (Moscow: <u>University</u> of Idaho, August, 1964), p. 45.



State More than U.S.

State Less than U.S.

Figure 5. Proportion of Idaho Population in Certain Age Groups Compared to the Proportion of United States Population in Like Age Groups, 1960.

Source: U.S. Department of Commerce, Bureau of the Census, A Picture of the Population of Your State, Charts from the 1960 Census of Population, Idaho--Graphic Summary.

graduates from the state of Idaho during 1957 to 1967. The primary reasons stated by respondents to Kerns' survey were, in order of importance:

1. Occupational opportunities elsewhere.

2. Graduate school elsewhere.

3. 'Limited' opportunities in Idaho.

4. In U.S. Armed Forces.

5. 'No' occupational opportunities in Idaho.

6. Teaching pays less in Idaho.

More pay elsewhere generally.
 Returned to native state elsewhere.

cut sinks weigen persons on to classified

Five of the eight primary reasons can be classified as "economically related" reasons.

The first and second of 12 secondary reasons for respondents leaving Idaho were: (1) Higher pay elsewhere 2 generally, and (2) Opportunities generally better elsewhere. Further, 64.0 percent of all respondents who left Idaho stated that better pay or better opportunity was either the primary or secondary reason for leaving the state. 3

There can be little doubt that Idaho's out-migration of rather young educated people is an economically related phenomenon.

## School-Age Population

Also pertinent to an understanding of Idaho's teacher mobility problem are data concerning the school-age population. Table 4-1 gives the number of school-age children, ages five through seventeen, per one hundred adults, ages twenty-one through sixty-four, within selected states and the United States in 1968. Idaho ranks sixth among the states in this respect, with sixty-one school-age children for every one hundred adults. Throughout the United States the average number of children per one hundred adults is fifty-two. The number of children for whom Idaho must provide teachers is proportionately greater than the number of

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William Alan Kerns, "Factors Relating to the Egress of University of Idaho Male Graduates from the State of Idaho" (unpublished Master's thesis, University of Idaho, Moscow, 1968), p. 53, Table 13.

<sup>&</sup>lt;sup>2</sup><u>Ibid.</u>, p. 56, Table 15. <sup>3</sup><u>Ibid.</u>, p. 60, Figure 5.

children for whom teachers must be provided by most other states. Idaho has 17 percent more school-age children than the national average.

#### TABLE 4-1

NUMBER OF SCHOOL-AGE CHILDREN (5-17) PER 100 ADULTS (21-64) WITHIN SELECTED STATES AND THE U.S.--1968

1.	New Mexico	•	•	•	•	•	•	•		•	•	•	•	•	•	•	69
2.	Utah	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	66
3.	(Mississippi .	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	64
•	(South Dakota	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	64
5.	Alaska	•	•	•		•	•	•	•	•	•	•	•	•	•	•	62
6.	(IDAHO	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	61
	(Louisiana.							•	•	•	•	•	•	•	•	•	61
8.	(Minnesota .	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	60
	(Montana		•	•	•	•	•	•	•	•	•	•	•	•	•	•	60
	(North Dakota			•	•	•	•	•	•	•	•	•	•	•	•	•	60
	(South Carolina															•	60
13.	Arizona		•	•	•	•		•	•	•	•	•	•	•	•	•	58
16.	Wyoming	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	57
18.	Colorado	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	56
26.	Washington .		•	•				•	•	•	•	•	•	•	•	•	55
36.	Oregon	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	52
	UNITED STATES	(A	\v	era	age	e)	•	•	•	•	•	•	•	•	•	•	52
43.	California .													•	•	•	49
48.	Nevada	•	•	•	•	•	•	•	•	•	•	•	•				47
40.	nevada	•	•	•	•	•	•	•	•	•	J	•	-				

Source: National Education Association, Research Division, Rankings of the States, 1968, Research Report 1968-Rl (Washington, D.C.: NEA, 1968), p. 8, Table 8.

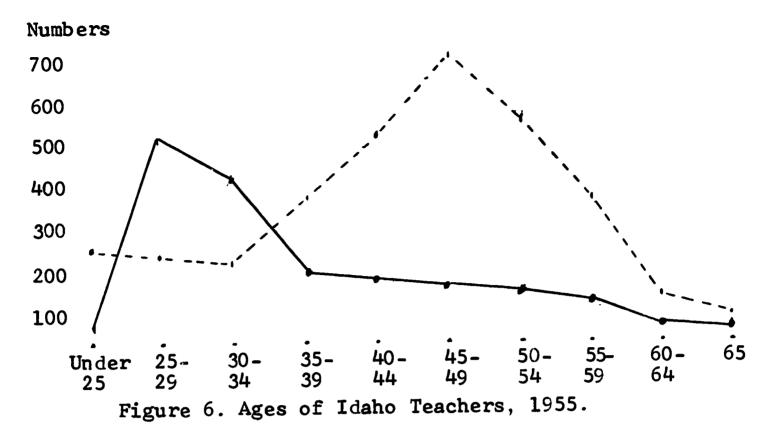
It has been estimated by the National Education Association that for the 1969-70 school year a total professional staff of 10,206 persons will be required by Idaho schools to meet properly the needs of the school-age population.

## Teacher Age

Figures 6 and 7 and Table 4-2 depict the age distribution of Idaho public school teachers in 1955 and 1960. The



National Education Association, <u>Teaching Career Fact</u>
Book (Washington, D.C.: NEA, 1966), p. 10, <u>Table 2</u>. (Estimates of professional staff needed for 1966-70 are based on a ratio of 50 professional staff members to 1,000 pupils.)



Women teachers\_\_\_\_

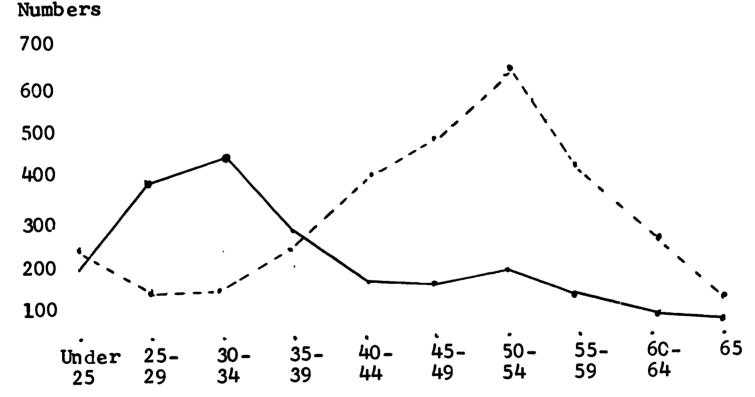


Figure 7. Ages of Idaho Teachers, 1960.

Women teachers---Men teachers

Source for Figures 6 and 7: Idaho State Department of Education, "About Idaho Public Schools" (Boise: The Department, No Date), p. 10. (Multilithed.)

"atypical character of Idaho's age structure" noted by Harmsworth is particularly evident in the ages of Idaho's male teachers.

TABLE 4-2

AGE DISTRIBUTION OF IDAHO TEACHERS--1955 AND 1960

		Me	n			Wome	n	
Age	1955 No.	Survey %	1960 No.	Survey %	1955 No.	Survey %	1960 S No.	Survey %
Under			<u>-</u>	-				
25	86	4.5	239	12.0	277	8.0	285	9.2
25-29	516	27.3	372	18.8	257	7.4	178	5.8
30 - 34	393	20.8	447	22.5	249	7.2	171	5.5
35-39	226	12.0	273	13.8	<b>3</b> 6 <b>3</b>	10.5	249	8.1
40-44	209	11.0	181	9.1	522	15.0	404	13.1
4 <b>5-4</b> 9	195	10.3	151	7.6	714	20.6	514	16.7
50-54	134	7.1	168	8.5	527	15.2	608	19.7
55-59	68	3.6	97	4.9	323	9.3	415	13.5
60-64	48		40	2.0	164	4.7	213	7.0
65 and					_			
0ver	12	.6	14	.7	72	2.1	44	1.4
Totals	1,887	99.7	1,982	99.9	3,468	100.0	3,081	100.0

Source: Idaho State Department of Education, About Idaho Public Schools (Boise, No Date), p. 11. (Multilithed.) (Percentages computed and added to table by investigators. Percentages do not total 100.0 percent in all cases due to rounding.)

In 1955, the greatest number of men teachers, 516, were between twenty-five and twenty-nine years of age. This number decreased to 393 between ages thirty and thirty-four, and to 226 between ages thirty-five and thirty-nine. The number of men teachers between ages thirty-nine and forty-nine remained fairly constant, then decreased again between ages forty-nine and fifty-nine (see Figure 6 and Table 4-2).

Age distribution of women teachers in Idaho schools in 1955 differed markedly from that of men. Two hundred seventy-seven women teachers under age twenty-five were employed that year. There were fewer women teachers between ages twenty-five and twenty-nine, and still fewer between ages thirty and thirty-four. The majority of women teachers

l<sub>Ibid.</sub>

in 1955 were between ages thirty-five and fifty-nine, with the greatest number, 714, between forty-five and forty-nine.

By 1960 the age distribution of Idaho public school teachers had shifted with the five-year time lapse so that the greatest number of men teachers, 447, were now between ages thirty and thirty-four. More young men under age twenty-five were employed than in 1955; however, in 1960, as in the former year, the number of men teachers within each five-year age group decreased after age thirty-nine. The one exception to this pattern was in the fifty to fifty-four age group which included more men teachers than did the fifty-five to fifty-nine age group (see Figure 7 and Table 4-2).

Women teachers by 1960 were most numerous between ages fifty and fifty-four, a circumstance resulting, as in the case of men teachers, from the five-year time lapse. Again, as in previous reporting, more women than men under age twenty-five were employed. The number of women between ages twenty-five and thirty-four decreased more noticeably than in 1955. The majority of women teachers in 1960 were between ages thirty-five and sixty-four.

Those reporting data for the Idaho State Department of Education chose to shift age bases in reporting the information for 1967-68, so the figures are not directly comparable to those reported for 1955 and 1960. It is evident, however, that the greatest number of men teachers, 701, in 1967-68 were between twenty-six and thirty years of age. A sharp drop in numbers was evident for the next higher age group; there was nearly 200 fewer male teachers ages thirty-one through thirty-five. The number of men within each age group continued to decrease steadily thereafter (see Table 4-3).

The bi-wodal age distribution of women teachers in Idaho schools is clearly illustrated in Figure 8. Six hundred sixty-three young women between ages twenty-one and twenty-five were teaching in 1967-68. Slightly more than half that number, ages twenty-six through thirty, taught that same year. The number decreased for the next age group (31-35); and then began to increase rapidly in numbers. There were 702 women, ages forty-six through fifty, 694 in ages fifty-one through fifty-five, and 816 women in ages fifty-six through sixty teaching in Idaho schools in 1967-68. A sharp decline in numbers was evident for the sixty-one through sixty-five age group. With sixty-five years of age heralding compulsory retirement, very few women that age were employed by the schools.

The reader is reminded of the drainant career patterns of teachers as discussed in Chapter 2 of this study. The sex and age distribution patterns of Idaho teachers illustrates dramatically the conclusions reached by Charters

TABLE 4-3
AGE DISTRIBUTION OF IDAHO TEACHERS--1967-68 SURVEY

	Me	n	Won	en
Age	Number	Percent	Number	Percent
Under 21	0	0	2	.04
21-25	373	12.0	663	12.7
26-30	701	22.5	398	7.6
31-35	506	16.2	345	6.6
36-40	404	12.9	420	8.0
41-45	325	10.4	512	9.8
46-50	255	8.2	702	13.5
51-55	213	6.8	694	13.3
56-60	196	6.3	816	15.7
61-65	126	4.0	568	10.9
Over 65	21	.7	85	1.6
TOTALS	3,120	100.0	5,205	99.74

Source: Idaho State Department of Education, "Age of Idaho's Professional Educators, 1967-68" (Boise: The Department, April 15, 1968). (Mimeographed.) (Percentages computed and added to table by investigators. Percentages do not total 100.0 percent in all cases due to rounding.)

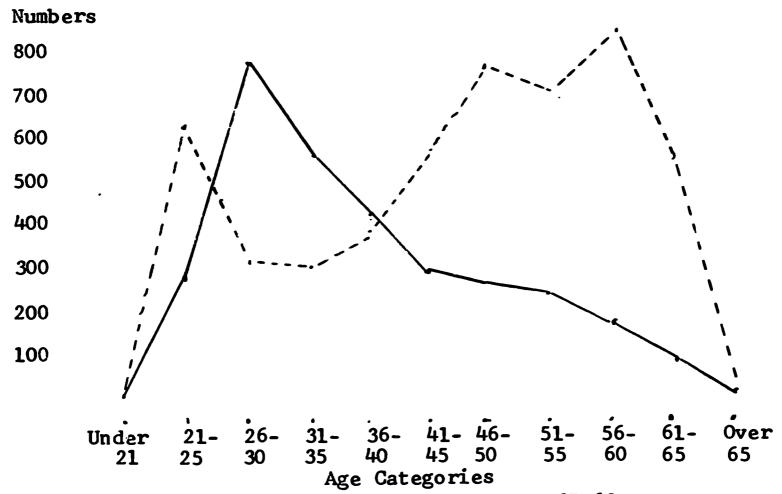


Figure 8. Ages of Idaho Teachers, 1967-68.

Women teachers-----Men teachers

Source: Idaho State Department of Education, "Age of Idaho's Professional Educators, 1967-68" (Boise: The Department, April 15, 1968). (Mimeographed.)



and others. Further, it appears that the re-entry or possible initial entry for Idaho female teachers is at the age of forty-five years. The implications for a statewide inservice education and the re-education program is most obvious!

Figure 9 shows the median age for Idaho public school teachers in 1955 and 1960. In 1955, the median age for men was 34.33 years, or 6.13 years less than the median age for women. By 1960, the median age for men had decreased slightly to 34.25 years. For women the median age had increased to 47.46 years. The difference between median ages for men and women teachers in Idaho had, by 1960 increased to 13.21 years.

It is important to note that, as a group, the female teachers in Idaho had increased in median age from 1955 to 1960. However, the males, as a group, did not show any increase in median age. With the data available to the investigators, it was difficult to objectively assess this phenomenon.

Median ages for U.S. public school teachers in 1962-63 are shown in Figure 10. In the United States, median ages for men and women differed by 11.9 years. Median ages for Idaho teachers in both 1955 and 1960 were somewhat greater than those for teachers in the nation in 1962-63.

Figure 11 shows the weighted mean average age for Idaho public school teachers in April, 1968. The weighted mean average age for women at the time was 44.1 years; for men it was 37.5 years. Because the median age and the weighted mean average age are two different types, but very similar measures of central tendencies, no absolute conclusions can be drawn between data reported on Idaho teacher ages. However, the data indicate that younger women have entered Idaho's teaching corps; and that the men are either remaining longer or they, too, are re-entering, probably at the age of thirty-one years.

Men teachers in the United States in 1966 were also younger than women teachers, as shown in Figure 12. The median age for men, 33.0 years, was about seven years younger than that for women, 2 since a much higher percent of women than men were in the higher age brackets during the 1965-66 school year.



<sup>10</sup>ne could facetiously say that for the Idaho female teacher, "Life begins at forty."

<sup>2&</sup>quot;Characteristics of Teachers: 1956, 1961, 1966," NEA Research Bulletin, VL, No. 3 (October, 1967), 88, Table 1.

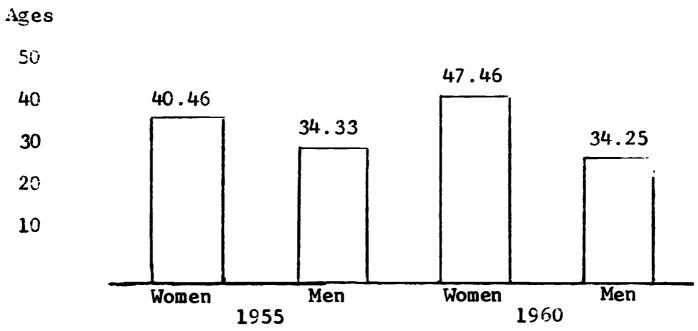


Figure 9. Median Ages for Idaho Public School Teachers, by Sex, 1955 and 1960.

Source: Idaho State Department of Education, About Idaho Public Schools (Boise, Nc Date), p. 11. (Multilithed.) (The median is that point above which 50 percent of the cases fall and below which 50 percent of the cases fall.)

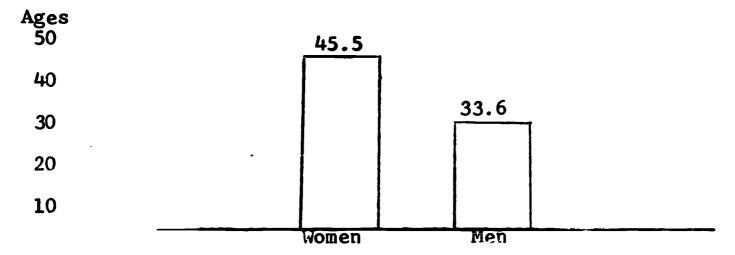


Figure 10. Median Ages for U.S. Public School Teachers, by Sex, 1962-63.

Source: "Interesting Facts and Figures on American Education," NEA Research Bulletin, XLI, No. 1 (February, 1963), 3. (Note: These ages remained identical for the 1961-62 school year for both men and women. In 1956 the national median age for women was also 45.5 years and 35.4 years for men. See the NEA Research Bulletin (October, 1967), p. 88, Table 1.)



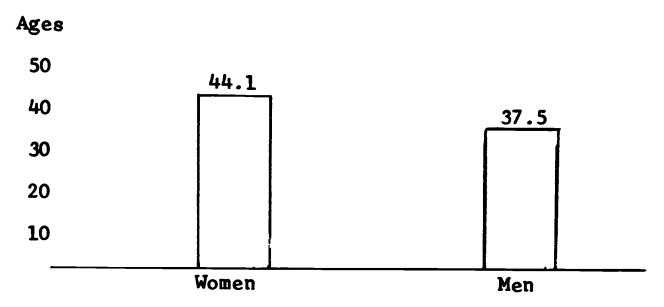


Figure 11. Weighted Mean Average Age for Idaho Public School Teachers by Sex, April, 1968.

Source: Idaho State Department of Education, "Age of Idaho's Professional Educators, 1967-68" (Boise: The Department, April 15, 1968). (Mimeographed.) (Weighted Mean Average Ages computed by investigators.)

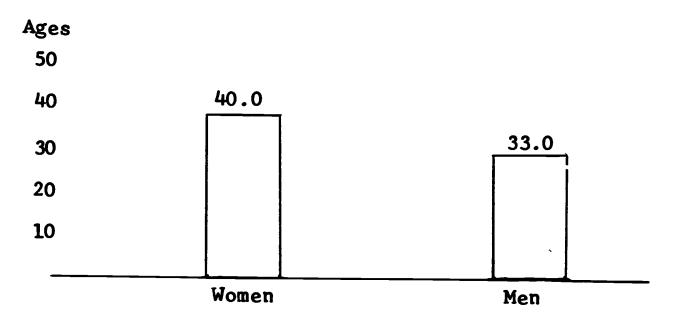


Figure 12. Median Age for U.S. Public School Teachers, by Sex, 1966.

Source: "Characteristics of Teachers: 1956, 1961, 1966," <u>NEA Research Bulletin</u>, VL, No. 3 (October, 1967), p. 88, Table 1.

On the national scene, female teacher median ages have declined from 45.5 years in 1956 to 40.0 years in 1966. The male median age decreased slightly during the same period from 35.4 to 33.0 years. If we were able to compute a median age for Idaho's teaching corps, it would fall between the age category 46-50 for females and 31-35 for males. By using age 35 for the male median age (assuming normal distribution in the 31-35 age bracket from Table 4-3) the Idaho male teacher would appear to be rather similar in age to the national male median of 33.0 years in 1966--the latest data available to us.

However, if the same assumption were made for Idaho female teachers, i.e., that the ages were distributed equally in age category 46-50, then the median age for Idaho female teachers would be about 48 years. Thus, the median age of the Idaho female teacher would still remain eight years greater than that reported nationally by the NEA in October, 1967, for the year 1966.1

In a booklet which was published in 1968 (and received by us just prior to the completion of the final draft), it was reported that as of the Spring of 1967, the age of public school classroom teachers averaged 41 years for women elementary school teachers and 39 years for women secondary school teachers. The average age for male secondary school teachers was 36 years. No elementary school average was reported due to a dearth of males in elementary education.<sup>2</sup>

The NEA source stated that the average number of years of teaching experience for all teachers was 12 years. Further, it was reported that the average number of years "in system of present employment" was 8 years. 3

It is interesting and disturbing to note that in comparison with at least two other states which border Idaho (and gladly attract Idaho teachers) that the ages of Idaho teachers tend to be higher than the ages of teachers reported in Washington and Utah. For example, in Washington in 1966-67, 59.7 percent of all teachers were between 20 and

The use of different sets of dates seems confusing, however, since comparable data are not available, interpolations must be made. Future investigators can certainly test our hypotheses.

<sup>2</sup>National Education Association, <u>Financial Status of</u> the <u>Public Schools</u>, 1968 (Washington, D.C.: NEA, 1968), p. 21, Table 7.

<sup>3</sup> Ibid.

44 years of age. 1 In Utah, the same year, 64.8 percent of all teachers were in the same age bracket. 2 In contrast, in 1967-68, 44.7 percent of Idaho's teachers were between 21 and 45 years of age. Fifty-five percent, or more than half, were between 46 and retirement age--65.

These data all tend to substantiate our hypotheses that the re-entry and possible initial entry into teaching for Idaho females is at the age of 45 years. For those women making their initial entry into teaching, it would appear that they will be married, have raised a family, and be "captive," i.e., be highly unlikely to be mobile, either intra- or interstate. The male teachers have an opposite problem. They enter at a younger age, about 25, and then withdraw from teaching or leave the state to teach elsewhere in the west.

Some possible solutions toward breaking this most apparent cycle will be offered in the final chapter of this monograph.

#### II. TEACHER PREPARATION

Academic preparation appears to have a direct effect on teacher mobility. If state certification standards permit persons to teach without first having at least a bachelor's degree, there is the possibility that persons who are short-time or non-career persons (usually women) will have played an important role in helping to solve Idaho's "teacher shortage." This position is backed by a logic which asks, "Without temporary, non-career oriented teachers, who would have staffed the classrooms?" Yet, the incidence of a large number of non-career oriented teachers appears to have had a depressing effect on: (1) teacher salaries, and (2) the image of the occupational group. These particular points are polemic and are beyond the scope of this study Nevertheless, the issues must be raised since there seems to be some relationship to noncareer teachers and the data which follow.

In the Fall of 1962, 31.9 percent of Idaho elementary teachers had less than standard certificates. Idaho ranked forty-ninth of the fifty states in this category. In Oregon, which ranked forty-eighth, 17.1 percent had less



Louis Bruno, "Teacher Supply and Demand in Wash-ington, 1967-68," A report of a study directed by the State Superintendent of Public Instruction (Olympia, Washington, 1968), p. 13, Table XV. (Multilithed.)

<sup>&</sup>lt;sup>2</sup>Utah State Board of Education, <u>Status of Teacher</u> Personnel in Utah, 1966-67 (Salt Lake City, No Date), p. 36, Table 30.

than standard certificates -- a very marked difference between forty-eighth and forty-ninth places. At the same time, Idaho ranked forty-seventh in number of secondary teachers who had less than standard certificates, with 11.3 percent in this category.

In 1959-60 the estimated percentage of Idaho elementary school teachers with at least a bachelor's degree was 39.2 percent. Idaho ranked forty-sixth among the fifty states. In a national comparison that same year, Idaho had the smallest percentage of elementary school teachers with master's degrees, 0.7 percent

The level of education for secondary school teachers in Idaho was much higher than that of elementary teachers. It was estimated that in 1959-60, 99.5 percent had at least a bachelor's degree. Idaho ranked eighth nationally in this respect. Idaho secondary school teachers holding a master's degree totaled 19.3 percent, with Idaho ranking forty-first among the fifty states.1

There has been a gradual increase in the number of teachers entering Idaho's teaching corps with greater college preparation since 1960. Tables 4-4 and 4-5 show data illustrating increased preparation for Idaho's elementary and secondary teachers, respectively. This increase in preparation has been due to the Idaho State Board of Education's adoption of a certification standard which will require a minimum of bachelor's degree to teach in Idaho by 1970. The academic preparation of Idaho's teaching corps has shown dramatic improvements during the 1960's. The focus of the State Board should now be on the problem of keeping the better prepared teachers in Idaho.

#### III. SUMMARY

The population characteristics discussed above may be summarized as follows:

1. In 1960, Idaho's percent of population between ages twenty and forty-nine (35.86 percent) was slightly less than that of the nation (38.25 percent) for the same age group. A similar difference existed in 1966 when the



National Education Association, Research Division, Rankings of the States, 1963, Research Report 1963-R1 (Washington, D.C.: NEA, January, 1963), pp. 26 and 28. (Further information regarding educational attainment of teachers in the United States is to be found in two publications by the National Education Association: Teaching Career Fact Book and Teacher Supply and Demand in Public Schools, 1966. Both reports were published in 1966.)

TABLE 4-4

IDAHO ELEMENTARY THROUGH 1967 ANALYSIS OF COLLEGE PREPARATION IN SEMESTER HOURS OF SCHOOL TEACHERS (GRADES 1-6) FOR THE PERIOD 1962

	Number of	Elementary	School Teachers	in Each	Category	
Year	59 Semester Hours or	60 to 89 Semester	90 to 119 Semester Hours	120 to 149 Semester Hours	150 or More Semester Hours	Totals
	Less	nours	2000	1701	422	[ <b>~</b>
all 196		989	936	1704	7 C	20.78
שטר וני		9	842	$\mathbf{x}$	4.50	<b>、</b> 1
70° 118			734	$\boldsymbol{\omega}$	344	<b>S</b>
77 77	n (	1 6	717	2081	330	S
all 196		1 C	T 7 7		360	Q
all 196			900	16	) (c	V
H B		Q	919	7)	666	)
81 -		l g	MOD allogo mova	COMPARED TO TOTAL		
	PERCE	PERCENTAGE OF E	GROOF			
701 11	ς <b>Γ</b> Ο	7	25.	46.03%	1.4	100.0%
all 190	77.0	י ומ	200	6.6	.53	•
all 196	0.13	•			.61	100.0%
all 196	0.20	つ・ <b>t</b> ・	. 07	) -: ) (	0.7	
961 116	90.0	2.5	10.	, t	10	•
901 118		0.3	18.	1.4	0	•
901 TT	%0:0 70:0	7.30%	16.85%	4.8	.80	•
all 120		) •				
					TACK	C+ 3+ 0

Statistics, Idaho State Director of Source: Files of Allen P. Jefferies, Department of Education, Boise, Idaho.

TABLE 4-5

ERIC Foulded by ERIC

ANALYSIS OF COLLEGE PREPARATION IN SEMESTER HOURS OF IDAHO SECONDARY SCHOOL TEACHERS (GRADES 7-12) FOR THE PERIOD 1962 THROUGH 1967

			Number of S	Secondary Sc	School Teachers	in Each	Category	
	Year	lω	9 Semester Hours or Less	60 to 69 Semester Hours	90 to 119 Semester Hours	120 to 149 Semester Hours	150 or more Semester Hours	Totals
	7	10	,	ر بـ	170	2	20	α
		1963	10	20 20	164	2078	1318	3610
	al	96	4	38	138	F-1	13	7
-	al	96	က	35	120	33	20	70
82	al	96	2	32	121	48	₩ 	83
2	al	96	2	745	122	53	28	ω
			PERCEN	ERCENTAGE OF EACH	GROUP	COMPARED TO TOTAL	71	
	a	96	•	649°	ထ	7.63	5.9	0.00
	_	1963	0.00%	1.39%	4.54%	57.56%	36.51%	100.0%
	al	96	•	.11	C)	1.35	3.2	0.00
	a	96	•	.95	.2	3.09	2.6	0.00
	al	96	•	.84	7	4.96	0.0	0.00
	a	96	•	.05	0	3.61	2.1	00.0
		Source:	Files of	Allen P. Jeff	feries, Dire	ctor of Stati	stics, Idaho	

Ulrector or Source: Files of Allen P. Jefferies, State Department of Education, Boise, Idaho. percent of population aged 21-64 was 49.5 for the United States and 46.7 for Idaho, a 2.8 percent difference.

- 2. In 1968, Idaho ranked sixth highest among the fifty states with regard to number of school-age children: 61 per 100 adults.
- 3. Ages of Idaho teachers varied greatly according to sex in 1955, 1960, and 1967-68. Idaho male teachers have been consistently younger and fewer in numbers than Idaho female teachers. It also appears that the Idaho female is older in years than those females teaching in the USA, on the average. Some decline has been noted in the average Idaho female teachers' ages between 1955 and 1967.
- 4. Each year since 1960 there has been a gradual increase in the number of teachers entering Idaho's teaching corps with greater college preparation.

The population characteristics summarized above pose serious questions for Idaho's teaching corps. Chief among these is the question of whether Idaho's schools, staffed in large part by people over forty, most of whom are women, and the majority of whom completed their teacher preparation before their pupils were born, are capable of competing with younger teachers, especially in the sophisticated fields of curriculum, instructional technology, problemsolving strategies, and personal interaction. The dearth of male teachers, especially in the elementary grades also poses a problem for possible bold steps to be taken in teacher recruitment.

#### CHAPTER 5

# SOME ECONOMICALL? ASSCCIATED ASPECTS OF TEACHER MOBILITY

### I. A SHORT SURVEY OF TEACHER SALARIES

Salary considerations are among the major factors affecting teacher mobility. In the Foreward to the NEA publication, Economic Status of Teachers, 1966-67, Glen Robinson wrote:

Salary, probably more than any other factor, determines the relative strength of weakness of any occupational group to attract and hold competent persons. The financial reward offered to members of the teaching profession thus becomes a critical issue.

## Teaching in Competition with Business and Industry

The teaching profession loses both teachers and prospective teachers to business and industry—which pay a college graduate a starting wage which may take four or five years for an individual with a comparable education, entering the teaching profession, to achieve. An NEA article, published in 1965, stated in part that:

According to a recent report, college graduates with a bachelor's degree will be offered the following average beginning salaries in 1965: engineering, \$7,404; accounting, \$6,420; sales-marketing, \$6,300; business administration, \$6,276. In the school year 1964-65, 66.3 percent of this country's classroom teachers, regardless of experience, will be paid less than \$6,500. It is not difficult to see why many college graduates, faced with a choice of teaching or some other field, accept the comparatively lucrative offers of business and industry.<sup>2</sup>

National Education Association, <u>Economic Status</u> of <u>Teachers</u>, 1966-67, Research Report 1967-68 (Washington, D.C.: NEA, 1967), p. 4.

<sup>2&</sup>quot;Conditions of Work for Quality Teaching," NEA Journal, LIV (March, 1965), 36. (Note: The mean refers to the arithmetic average and is the sum of the separate

According to Gertrude N. Stieber, research associate, NEA Research Division, a study comparing the salaries of five professional groups--salaried accountants, auditors, attorneys, chemists, and engineers--and the professional teacher indicated that:

The average salary of the five professional groups in 1960, the first year the study was made, was about \$4,200 above the average paid classroom teachers. In 1964, the most recent study reported, the gap had widened to \$4,784, or 80 percent above the classroom teacher average.1

A more recent source of information, The Economic Status of Teachers, 1966-67, gives the following data on trends in salaries paid teachers compared with salaries paid workers in comparable professions:

Average starting salaries for men graduates in June 1967 with bachelor's degrees will be \$8,544 for engineers, \$8,196 for physics majors, and \$6.780 for liberal arts graduates.

Average starting salaries in 1966 for women with bachelor's degrees, employed by companies in private industry, were \$8,208 for women engineers, \$7,452 for majors in chemistry, and \$6,984 for women graduates in accounting. All of these starting salaries are well above the average beginning salary for teachers with bachelor's degrees.<sup>2</sup>

In Idaho, a beginning teacher with a B.A. degree can expect to earn between \$5,100 and \$5,400 in his primary job (see Table 5-1).

# Teacher Salaries in Idaho Compared to Teacher Salaries in the Nation and Selected States

According to data concerning the average salary of public school teachers for the 1963-64 school year, the state of California ranked first in the nation and

scores or measures divided by their number. The median is that point above which and below which 50 percent of all cases included in the distribution may be found.)

Gertrude N. Stieber, "Teacher Salary Trends," NEA Journal, LIV (September, 1965), 20.

National Education Association, Economic Status of Teachers, 1966-67, op. cit., p. 6.

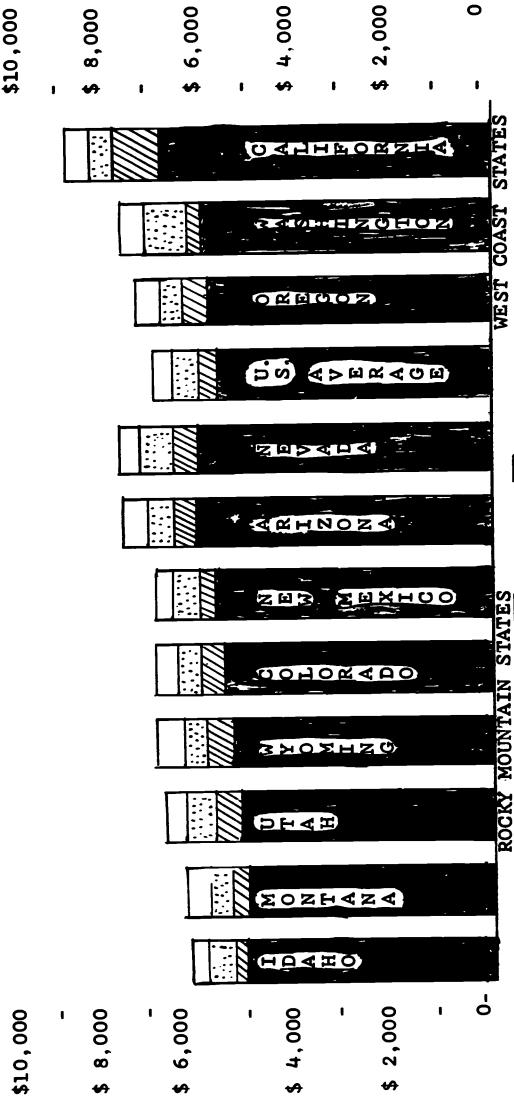
TABLE 5-1

ESTIMATED AVERAGE ANNUAL SALARY OF CLASSROOM TEACHERS OF SELECTED STATES IN FULL-TIME PUBLIC ELEMENTARY AND SECONDARY DAY SCHOOLS: 1962-63, 1964-65, 1966-67, AND 1967-68

		School School	Year		Percent
State	1962-63	1964-65	1966-67	1967-68	of Increase 1962-67
ROCKY MOUNTA	AIN STATE	<u>s</u>			
Idaho Arizona Colorado Montana Nevada New Mexico Utah Wyoming	\$4790 \$6250 \$5675 \$5150 \$6270 \$5820 \$5205 \$5535	\$5150 \$6670 \$6025 \$5635 \$6530 \$6080 \$5945 \$5996	\$5875 \$7230 \$6625 \$6000 \$7390 \$6630 \$6490 \$6450	\$6045 \$7610 \$6900 \$6375 \$7825 \$6981 \$6640 \$7052	26% 21% 21% 23% 24% 20% 27% 29%
WEST COAST	STATES				
California Oregon Washington	\$7050 \$6050 \$6245	\$7900 \$6470 \$6400	\$8450 \$7000 \$7330	\$8900 \$7550 \$7750	26% 25% 24%
NATIONAL AVERAGE	\$5735	\$6235	\$6821	\$7296	27%

Sources for Figure 13 and Table 5-1: U.S.

Department of Health, Education, and Welfare, Office of Education, Digest of Educational Statistics, 1964 Edition, Bulletin 1964, No. 18 (Washington, D.C.: USGPO), p. 37. Also, National Education Association, Research Division, Rankings of the States, 1963, Research Report 1963-R1 (Washington, D.C.: NEA, January, 1965), p. 29, Table 33; 1965, Research Report 1965-R1 (Washington, D.C.: NEA, January, 1965), p. 23, Table 29; 1967, Research Report 1967-R1 (Washington, D.C.: NEA, January, 1967), p. 26, Table 36; and 1968, Research Report 1968-R1 (Washington, D.C.: NEA, January, 1968), p. 22, Table 39.



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Figure 13. Estimated Average Annual Salary of Classroom Teachers of Selected States in Full-Time Public Elementary and Secondary Day Schools: 1962-63, 1964-65, 1966-67, and 1967-68.

0

26; 1968, Research 3, 1965, 1967, 1968.) pp. 39 , Rankings Education, and ition. Bulletin Report Education, Digest of Educational Statistics, 1964 Edition, Education, Education, Bulletin 1965, No. 4 (Washington D.C.: USGPO) p. 1965 Edition, Bulletin 1965, No. 4 (Washington D.C.: USGPO) p. 19. National Education Association, Research Division, S. Research Report 1963-R1, Table 33, p. 29; 1965, Research Report 1967-R1, Table 36, p. 26; 1968, b. 22 (Washington, D.C.: NEA, January, 1963, 1964, 1967, Research Report 1967: NEA, January, 1963, 1964, 1965, 1968, b. 22 (Washington, D.C.: NEA, January, 1963, 1965, 1968, b. 22 (Washington, D.C.: NEA, January, 1963, 1968, b. 22 (Washington, D.C.: NEA, January, 1963, 1968, b. 22 (Washington, D.C.: NEA, January, 1963, 1968, b. 22 (Washington, D.C.: NEA, January, 1968, b. 22 (Washington, D.C.: NEA, January, 1968, b. 22 (Washington, D.C.: NEA, January, 1968, b. 25 (Washington, D.C Source for Figure 13 and Table 5-1: U.S. Department Table 1963, 1964, No. 18; and  $\frac{1}{9}$  and  $\frac{1}{9}$  and  $\frac{1}{9}$ Office of Table 7 States delfare, 1965-RI of the Report

Utah ranked twenty-smith. Idaho ranked thirty-ninth. For the 1966-67 school year, the National Education Association reported that California still ranked first. Utah twenty-fourth, and Idaho thirty-eighth, a rise of one step. For the following year. 1967-68. California ranked first, Utah twenty-eighth. and Idaho was in the forty-first position. 2

The 1964 and 1966 Idaho teacher turnover studies presented data showing that the major reasons for teacher turnover within Idaho were insufficient salary and other fiscally-related problems. The major reason teachers left the state was because of the higher salaries offered in other states. Eighty-five percent of the responding turnover teachers stayed in the eleven western states: Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon, and California. Without exception, other western states paid higher average salaries to the public school classroom teachers than were being paid in Idaho during the school years 1962-63, 1964-65, 1966-67, and 1967-68 (see Figure 13 and Table 5-1). Also note in Table 5-1 that although the relative percent increase in Idaho's salaries is comparable, it does not show any absolute gain.

In the preceding discussion on teacher salaries, U.S. Office of Education and NEA estimates were used. These sources were selected in order to utilize comparable data for other western states. Since data are usually one or two years dated, these estimates are very accurate indicators of teacher salaries.

The Idaho State Department of Education also publishes a yearly average salary summary for all Idaho educators. Table 5-2 shows the average salary for all Idaho educators from 1961-62 through 1966-67. These salary data are slightly higher than the NEA estimates for the latter are for classroom teachers only and exclude administrator's salaries, which are included in the Idaho State Department of Education figures.

The school year 1962-63 showed the least gain of this selected period. It should be noted that the teacher

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<sup>&</sup>quot;Ranking the States, 1963-64," <u>NEA Research Bulletin</u>, XLII, No. 1 (February, 1964), 14.

National Education Association, Rankings of the States, 1968, op. cit., p. 22, Tables 38 and 39.

Donald C. Orlich, Evelyn M. Craven, and R. D. Rounds, Teacher Turnover in Idaho Public Schools: 1963 (Pocatello: Idaho State University, July, 1964), pp. 65-74. (Multilithed.) And, Orlich et al., 1966, op. cit., pp. 70-72 and 85. See Also, William C. Bruce, "Teacher Turnover," The American School Board Journal, CIL (November, 1964), 29.

turnover at the end of the 1962-63 school year was the all-time high for the state of Idaho of 1,341 individuals, or 18.66 percent of the total number of full-time professionally certified personnel teaching in Idaho. This phenomenon was reported during the 1966-67 school year when 1,313 full-time teachers left their positions (see Table 1-1). There appears to be an inverse relationship between Idaho teacher mobility and salary increases. In years when salary increases are low there follows a relatively high teacher turnover. Conversely, years of high salary increases are accompanied by relatively low turnover.

TABLE 5-2

AVERAGE SALARIES FOR ALL IDAHO PUBLIC SCHOOL EDUCATORS
FOR THE SCHOOL YEARS 1961-62 THROUGH 1966-67

School Year	Average Salary	Average Increase Over Preceding Year
1961-62	\$4761	\$223
1962-63	\$4886	\$125
1963-64	\$5163	\$277
1964-65	\$5354	\$191
1965-66	\$5856	<b>\$501</b>
1966-67	\$6012	<b>\$1</b> 56

Source: Idaho Department of Education, Survey of Teachers' Salaries, School Year 1966-1967 (Boise, 1966) pp. 4-5. (Mimeographed.) (All salaries paid to all professional staff members are included in the above. Table 5-1 presents salaries of classroom teachers only. The reader should compare data in Table 5-1 with data in Table 5-2.)

Average salary figures, in themselves, are not the entire picture. These data do not indicate the close relationship between teacher preparation and experience and the prevailing single salary schedule. A large number of minimally prepared teachers will lower any salary average, as will a large corps of degreed, but inexperienced, personnel. In addition, average salaries do not recognize "fringe benefits" that make particular districts attractive to prospective teaching candidates.

A major salary problem in Idaho is the maximum salary which a teacher can expect to achieve within a district in a specified number of years. The 1967 Idaho Education Association salary survey summarizes the 1967-68

salary schedules for 102 of Idaho's 117 school districts. In the IEA survey shows a wide range in the salary schedules (not salaries). The lowest minimum salary schedule figure for a bachelor's degree was \$4,450 and ranged to a high minimum of \$5,400. The highest maximum salary scheduled was \$7,465. The lowest minimum scheduled salary for a master's degree was \$5,000 and ranged to a high minimum of \$6,000. The highest maximum reported salary schedule for an MA degree was \$8,575. The reader must remember that these figures represent a salary schedule; whether or not any teacher is at the maximum level is another matter.

Lest the reader think that the established salary schedule maximums are "good," he should be aware that it would take from seven to twenty-three years of teaching experience to obtain the possible maximum salaries! There is almost no possibility of doubling one's salary in a period of ten years if one remains teaching in a single Idaho school district. Tables 5-3 and 5-4 summarize the Idaho Education Association's 1967-68 salary schedule survey findings.<sup>2</sup>

When we compared the salary schedule maxima and minima for the 1966-67 and 1967-68 school years, it was observed that for 1967-68, there was an apparent increase of approximately \$300 in the beginning bachelor's and master's degree scheduled salary throughout the state of Idaho. However, when comparing the median salary schedule maxima for teachers holding the bachelor's degree, there was no change. The median remained between the \$6,300-\$6,599 salary category for both 1966-67 and 1967-68. This could be interpreted logically to mean that there was no substantial raising of the scheduled maximum salaries for those holding the BA degree in 1967-68.

Median salary schedule maxima for the master's degree teacher fell between the \$6,500-\$6,999 category in 1966-67. During 1967-68, the median salary schedule maximum was found in the \$7,200-\$7,499 grouping. Thus, in 1967-68, there appeared to be about a \$500 to \$600 increase in the maximum salary schedule for teachers holding a MA degree.

ldaho Education Association, "Summary of Salary Schedules: 1967-68," Research Bulletin, VI, No. 1 (May 26, 1967), 11 pp. (Mimeographed.)

<sup>&</sup>lt;sup>2</sup>For two comprehensive reports on classroom teacher salary schedules, the reader is referred to: Evaluation of Salary Schedules for Classroom Teachers, 1966-67, Research Report 1966-R19, Research Division, NEA (Washington, D.C.: NEA, 1966), price \$1.25, Stock #435-13300; and Evaluation of Teacher Salary Schedules, 1966-67 and 1967-68, Research Report 1967-R17, Research Division, NEA (Washington, D.C.: NEA, 1967), price \$3.00, Stock #435-13336.

TABLE 5-3

MINIMUM AND MAXIMUM SALARY SCHEDULES REPORTED FOR THE SCHOOL YEAR OF 1967-68 FOR 102 OF IDAHO'S 117 SCHOOL DISTRICTS FOR TEACHERS HOLDING AT LEAST A BACHELOR'S DEGREE

Salary Range	Salary Schedule Minimum Number of Districts Reporting	Salary Schedule Maximum Number of Districts Reporting
\$4499 or less	1	0
\$4500-\$4799	3	0
\$4800-\$5099	45*	0
\$5100-\$5399	43**	3
\$5400-\$5699	10	2
\$5700-\$5999	0	6
\$6000-\$6299	0	23
\$6300-\$6599	0	29* and **
\$6600-\$6899	0	22
\$6900-\$7199	0	9
\$7200-\$7499	0	5
\$7500-\$7799	0	2
\$7800 and over	0	1
Total	102	102

Source: Idaho Education Association, "Summary of Salary Schedules: 1967-68," Research Bulletin, VI, No. 1 (September 6, 1967), 11 pp. (Mimeographed.) And, "Summary of Salary Schedules: 1966-67," Research Bulletin, V, No. 1 (May 26, 1966).

Note: A district salary schedule is the adopted board policy wherein a teacher will receive known salary increments for a period of specified years--usually ten years. Once the maximum increment or step has been attained, a teacher remains "at the top" of the schedule without any yearly guaranteed salary increase.

\*Indicates median salary schedule category for 1966-67.

\*\*Indicates median salary schedule category for 1967-68.

TABLE 5-4

MINIMUM AND MAXIMUM SALARY SCHEDULES REPORTED FOR THE SCHOOL
YEAR OF 1967-68 FOR 102 OF IDAHO'S 117 SCHOOL DISTRICTS
FOR TEACHERS HOLDING AT LEAST A MASTER'S DEGREE

Salary Range	Salary Schedule Minimum Number of Districts Reporting	Salary Schedule Maximum Number of Districts Reporting
\$4499 or less	0	0
\$4500-\$4799	1	0
\$4800-\$5099	4	0
\$5100-\$5399	24*	0
\$5400-\$5699	50**	1
\$5700-\$5999	22	1
\$6000-\$6299	1	1
<b>\$6300-\$65</b> 99	0	9
\$6600-\$6899	0	10*
\$6900-\$7199	0	28*
\$7200-\$7499	0	20**
<b>\$7500-\$77</b> 99	0	17
\$7,800-\$8099	0	8
\$8100 and over	0	7
Total	102	102

Source: Idaho Education Association, "Summary of Salary Schedules: 1967-68," Research Bulletin, VI, No. 1 (September 6, 1967), 11 pp. (Mimeographed.) And "Summary of Salary Schedules: 1966-67," Research Bulletin, V, No. 1 (May 26, 1966).



<sup>\*</sup>Indicates median salary schedule category for 1966-67.

<sup>\*\*</sup>Indicates median salary schedule category for 1967-68.

Again, we caution the reader to understand that what appears on a salary schedule and the number of teachers receiving that salary has no relationship.

Further, Table 5-3 shows that five Idaho school districts had maximum salaries which were exceeded by the beginning teachers' salary in fifty-three other Idaho school districts. One need not leave Idaho to raise his teaching salary.

In the final chapter of this report, we shall present additional data concerning classroom teachers' salaries for 1967 for the Rocky Mountain and West Coast States.

Effort was made to bring Idaho's teaching salaries up to a competitive level for the 1966-67 school year. However, this progress was minimized the following year (1967-68) when a token increase averaging \$156 was obtained. As of 1968, Idaho is forced into a non-competitive role in teacher recruitment in the geographic area in which it must attract teachers.

It must be remembered that Idaho teachers' salaries have not been competitive during the twenty-five year period between 1943 and 1968. What this means is that greater financial effort must be exerted just to maintain the status quo. To attract better academically prepared teachers, even greater financial effort must be exerted.

#### II. LEGISLATED SALARY MINIMUMS

what neglected, one need only refer to the Idaho School Codes. There, in Section 33-1219, is spelled out the state's mandatory and minimum salary schedule. In Idaho, the minimum allowable salary for a teacher with four years of accredited college training (BA equivalent) is \$2370. Table 5-5 presents the state of Idaho's legislated salary minimums. To say that they are obsolescent is a redundant statement. This is one section of the education codes that must be amended to reflect current economic conditions, e.g., all categories could be revised upward at least \$3,300.1



For the reader who would like to pursue the topic of salary schedules and minimum salary schedules, he is directed to State Minimum-Salary Laws and Goal Schedules for Teachers, 1966-67, Research Report 1966-R18, Research Division, National Education Association, Stock #435-13298, \$1.00, c/o NEA, 1201 Sixteenth Street, N.W., Washington, D.C. 20036.

TABLE 5-5

MINIMUM SALARY SCHEDULE FOR IDAHO TEACHERS
AS SPECIFIED BY THE IDAHO CODE

Year of Service	Years o	f Accredit	ed College	Training
Being Rendered	Two	Three	Four	Five
1 2 3 4 5 6 7 8 9	\$1920 \$1965 \$2020 \$2065 \$2100 \$2145 \$2190 \$2235 \$2235 \$2235	\$2120 \$2180 \$2240 \$2300 \$2360 \$2420 \$2480 \$2540 \$2540	\$2370 \$2442 \$2514 \$2588 \$2658 \$2730 \$2802 \$2874 \$2946 \$3018	\$2570 \$2660 \$2750 \$2840 \$2930 \$3020 \$3110 \$3200 \$3290 \$3380
	:	, T	\$3018 \$3090	\$3380 \$3470

Source: Idaho Code, Volume 6A, Section 33-1219, 1963, p. 83.

In its July 1, 1968, report, the Idaho Task Force Committee for Education adopted twenty-six specific recommendations concerning Idaho's public education systems. The report stated in part:

RESOLVED, That the following recommendations be made to Citizens' Advisory Council on Education, The State Board of Education and the Fortieth Legislature. . . .

The report then presented its recommendations. Among those appropriate to the discussion on salaries are the following:

24. To participate in foundation program funds, the minimum salary which a certificated teacher with a bachelor's degree may be paid be no less than \$5400.

Council Comment. The Advisory Council felt the minimum salary of \$5400 was an agreeable figure; however, it was felt it should insert the words 'for the year 1968-69.' In other words, five years from now this particular minimum salary could be out of date and would surely have to be updated from year to year.



26. The total average compensation including major fringe benefits of Idaho school personnel be brought into line with the total average comparable compensation of school personnel in the states of Montana, Utah, Wyoming, and Colorado. We further recognize that much of the competition for Idaho teachers originates in the states of Oregon, Washington, California, and Nevada and must be considered in the determination of teachers' compensation.

The Committee's report can be defended both logically and empirically. If these two recommendations are adopted by the Idaho Legislature in 1969, a major stumbling block toward keeping Idaho teachers in Idaho will be partially solved.

Tables 5-3 and 5-4 add evidence to our conclusion that Idaho must exert even greater financial effort to compete for qualified teachers. These two tables reflect the salary schedules under which nearly all Idaho classroom teachers were affected for the 1967-68 school year. It can be observed that the maximum bachelor's degree salary schedule (\$7499) for 99 of 102 school districts for Idaho classroom teachers in 1967-68 is exceeded by the estimated 1967-68 average teachers' salary in sixteen of the fifty United States. Further, in 1967-68, the western states of California, Arizona, Nevada, Washington, Oregon, Wyoming, New Mexico, and Colorado all reported an estimated average salary for all teachers in public schools of \$6900 or greater.3

In all but thirty-two Idaho school districts, the 1967-68 school year maximum salary schedules for teachers with master's degrees (\$7499) will be below the average classroom teachers' salary in Oregon, Arizona, Washington, Nevada, and California. What this means, then, is that Idaho must continue to put forth greater financial effort



<sup>1&</sup>quot;Recommendations for the Public Schools of Idaho by The Idaho Task Force Committee for Education," Idaho State Department of Education, Designing Education for the Future (Boise, July, 1968), pp. viii, 8 and 9.

There are 117 Idaho school districts, but 102 reported their salary schedules. The remainder do not have salary schedules or did not respond to the IEA salary schedule survey. Those districts not responding accounted for less than 100 classroom teachers, or about 1.4 percent of all of Idaho's classroom teachers. Stated positively, about 98 percent of Idaho's classroom teachers work under the salary schedules reported in the IEA study.

<sup>3</sup>Rankings of the States, 1968, op. cit., p. 22, Table 39.

<sup>4</sup>Ibid.

during the 1969-71 biennium. In connection with these findings, it is well to note two points made by Kershaw and McKean, who, in a study conducted under the auspices of the Ford Foundation and the RAND Corporation, concluded that:

- 1. Salaries significantly influence the supply of applicants from which school officials can choose and therefore influence the quality of the teaching staff in various assignments.
- 2. Salary differences of one or two thousand dollars per year have substantial impacts on the ability of schools to attract well-trained teachers.

These conclusions are somewhat similar to those made by Sorensen, who, in 1958-59, studied the salary structure of Nebraska school districts.<sup>2</sup>

### III. "MOONLIGHTING"

Inadequate salaries inevitably result in efforts to remedy the situation. Among teachers, such efforts frequently take the form of "moonlighting," or multiple jobholding. A Special Labor Force Report stated that:

Multiple jobholding rates vary with the worker's main occupation. As in prior surveys, moonlighting rates in May, 1966, were highest among men who were teachers-1 out of 5 had a second job. Some elementary and high school teachers may moonlight because they have an opportunity to take evening jobs at school in some professional activity, but other evidence suggests that the most likely explanation is the comparatively low earnings of teachers. The dual jobholding rate of other male professional and technical workers is high, but less than half that of teachers.

Harold W. Guthrie's article, "Who Moonlights and Why?", suggests that the teaching profession is an economically deprived one and that men teachers, particularly those who are married with a non-working wife, must moonlight to



Joseph A. Kershaw and Roland N. McKean, <u>Teacher</u>
Shortages and Salary Schedules (New York: McGraw-Hill Book
Company, 1962), p. 3.

<sup>&</sup>lt;sup>2</sup>Kirk Miles Sorensen, "A Preliminary Study of Classroom Teacher Salaries in Nebraska Schools" (unpublished Doctoral dissertation, University of Nebraska, Lincoln, 1961).

<sup>3</sup>Harvey R. Hamel, "Moonlighting--An Economic Phenomenon," Monthly Labor Review (October, 1967), pp. 21-22.
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maintain a standard of living commensurate with their professional status.1

Though moonlighting may be a common practice, it too frequently results in frustration for teacher and student, for the energy which should be used in the classroom may be consumed by the extra job, in which case the pupils do not receive the full measure of the teacher's knowledge and ability.<sup>2</sup>

## IV. PROGRESS TOWARD EQUITABLE SALARIES

However disheartening the teacher salary picture may appear, it should be noted that progress has been and is being made. Teacher salaries are seldom assigned on the basis of sex as was previously the case. Instead, salaries are now generally determined on the basis of training and experience. The single salary schedules used by many districts have reduced the inequalities which formerly existed between elementary school and secondary school teaching salaries. Although, men have many more opportunities for extracurricular activity pay, such as coaching.

The Delegate Assembly of the Idaho Education Association at its March, 1968, meeting approved the following recommendations regarding salary schedules:

- 1. Recommended Guidelines for Salary Schedules. The IEA recommends the following guidelines to be used in establishing and revising salary schedules at the local level: Professional Salary Schedules should:
  - a. Be cooperatively developed through the process of professional negotiations by school board members, administrators, and teachers.
  - b. Be based on preparation, teaching experience, and professional growth.
  - c. Be based on the index or percentage increase system to insure proportionate adjustments at all steps and training levels.
  - d. Establish a minimum salary for classroom teachers on the preparation level of no less than the bachelor's degree.



Harold W. Guthrie, "Who Moonlights and Why?" Illinois Business Review (March, 1965), p. 8.

<sup>&</sup>lt;sup>2</sup>This assumption has been used against married women teachers as well.

- e. Include a starting salary high enough to attract highly competent people into the profession.
- f. Provide large enough yearly increments and training level increases to insure security and satisfaction for career teachers.
- g. Provide a maximum salary at least double the bachelor's degree minimum for professionally qualified teachers with a master's degree or beyond.
- h. Encourage and provide for professional growth by establishing specific salary classes for successive levels of training through the doctor's degree.
- i. Establish intermediate preparation levels less than a full academic year beyond the bachelor's degree.
- j. Incorporate by salary ratios based on relative responsibility extra pay schedules for personnel such as department heads, team teaching leaders, coaches, supervising and administrative staff, and personnel involved in extracurricular activities.
- k. Provide extra pay addends for teachers involved in curriculum planning, project development, research and other professional responsibilities carried on beyond the regular school year.
- 1. Provide additional 'longevity increments' to teacher beyond the maximum levels of the salary schedule.
- 2. Seventy Percent M & O Budget. The IEA recommends that at least 70% of the M & O budget, after subtracting transportation, be used by school districts for teacher salaries.
- 3. Regional Committees. The IEA recommends that each PR and R Region Director be responsible for establishing a regional salary scheduling committee made up of persons who have attended NEA salary schools plus selected superintendents who may be available to assist local associations on a consultive basis in developing improved salary schedules.

<sup>&</sup>lt;sup>1</sup>The Newsletter, Idaho Education News, XXII, No. 9 (Boise, Idaho, April 15, 1968), 4.

In addition to the above guidelines for salary schedules, the following salary schedule was also adopted by the IEA as the recommended schedule for the 1968-69 school year:

Level	Percentage of Base	BA (1.00)	MA (1.15)
1. 2. 3. 4. 5. 6. 7. 8. 9.	(1.00) (1.05) (1.10) (1.15) (1.20) (1.25) (1.30) (1.35) (1.40) (1.45)	\$5600 \$5880 \$6160 \$6440 \$6720 \$7000 \$7280 \$7560 \$7840 \$8120	\$6440 \$6720 \$7000 \$7280 \$7560 \$7840 \$8120 \$8400 \$8680 \$8960
11. 12.			\$9240 \$9250

The above salary schedule is based on \$5600 beginning salary for BA with 5% increment on the base. It was recommended by the IEA that the schedule be increased approximately 8% each year until Idaho's salaries were competitive with other states. This would mean that the 1969-70 recommended salary for beginning BA salary would be \$6,000.1

A strong stand by the IEA in favor of increased salaries should have a beneficial effect upon the teacher salary situation in Idaho. However, it should be realized that the IEA's second major point--receipt of 70 percent of the M and O monies for salaries--is contingent entirely on the assessment ratios in the various counties. Few counties have ever assessed property at the legislatively prescribed levels. Thus, it would behoove those in education to watch very carefully the county assessment ratios in order to obtain the legally approved amount of property tax due to public education.<sup>2</sup>

#### V. TEACHER MORALE AND MILITANCY

Morale and militancy are two concepts which are playing increasingly important roles in the professional

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<sup>&</sup>lt;sup>1</sup><u>Ibid</u>., p. 8.

For a thought provoking discussion on Idaho tax structure, the reader is referred to Cornelius A. Hoffman, An Evaluation of the Idaho Tax Structure (Pocatello: Idaho State University, 1964). A more general, but most applicable, article on property taxes is: Donald C. Orlich, "The Role of Property Taxes in Financing the Public Schools," Part I and Part II, The American School Board Journal. CL (November, 1965, pp. 10-12, and December, 1965, pp. 15-16. 39 and 52).

lives of the nation's teachers. The relationship of morale to the well-being of the individual and, consequently, to the quality of work he produces has long been recognized as a vital factor in the lives of teachers and in the successful operation of schools. Militancy among teachers, on the other hand, is a fairly recent phenomenon, in keeping with the present era of political activism. Teacher morale and teacher militancy are both closely related to the problem of teacher mobility.

#### Teacher Morale

The teacher who derives a sense of satisfaction and personal worth from his work will stay in his position. The factors which contribute to such an attitude vary in importance with the individual. High or low morale among teachers as a group results from the interplay of these factors.

Surveys conducted by the George Peabody College indicate that the most common causes of poor morale among teachers are:

tration, lack of a daily period for relaxation, unsatisfactory plant and buildings, and lack of teacher materials and adequate equipment. Other causes in order of importance were: absence of democratic administrative procedures and sharing in policy making; lack of cooperation of the public or of boards of education; impoverished social and recreational life; and inadequate provision for teacher tenure.

All of the foregoing causes of poor morale have been listed by Idaho's turnover teachers as influencing their decisions to leave their positions since 1955 when systematic studies of Idaho teacher mobility began.

Another factor which affects morale is that of misassignment of teachers. In the NEA publication, The Assignment and Misassignment of American Teachers, it stated:

Our most earnest claims to professional status are undermined if anyone can be assigned to teach almost anything: if a history major who has six college credits



Department of Classroom Teachers of the National Education Association, Conditions of Work for Quality Teaching (Washington, D.C.: NEA, 1959), p. 11.

in chemistry can become a chemistry teacher overnight, or if a high school physical education teacher can take over a second grade without any preparation in the teaching of reading, or if a new teacher who is from a socially and racially homogeneous suburban community and who has a low tolerance for cultural and attitudinal differences is assigned to a school characterized by cultural and racial differences and tensions. 1

Misassignment occurs in almost every type of geographical setting and educational setting imaginable, with the greatest percentages involving misassignments in rural communities and in high schools. One piece of evidence supporting this claim is Thomas' finding that during the 1961-62 school year, 52 percent of all classes taught in Richfield and Dietrich (Idaho) High Schools were taught by teachers without either a major or minor in the area--gross misassignment, at best.

Contributing to lowered morale are the lowered status of the profession as a result of misassignment and the frustration experienced by individual teachers faced with teaching situations they are not prepared to handle.

Lack of sufficient, certified personnel to adequately staff the schools has resulted in many districts in the issuing of "letters of authorization" or "emergency substitute certificates." These are temporary permits, generally of one year duration, permitting individuals without proper certification to teach where an emergency situation exists. During the 1966-67 school year two percent of Washington state teachers and 1.4 percent of Utah teachers taught on this basis. Information is not available regarding the percentage of Idaho teachers who taught on emergency certificates in 1966-67. In the Pocatello School District in



Paul M. Ford (ed.), The Assignment and Misassignment of American Teachers, National Commission of Teacher Education and Professional Standards (Washington, D.C.: NEA, 1965), p. v.

<sup>&</sup>lt;sup>2</sup><u>Ibid.</u>, p. 9.

Neil Thomas, "An Investigation into the Cost of Transportation in School Districts 314 and 316 of Lincoln County, Idaho, and The Estimated Cost in a Reorganized District" (unpublished Master's paper, Idaho State University, 1963), p. 63.

Bruno, "Teacher Supply and Demand in Washington 1967-68," op. cit., p. 12, Table XIV.

Utah State Board of Education, Status of Teacher Personnel in Utah 1966-67, op. cit., p. vi.

1967-68, 70 of 527 full-time and part-time classroom teachers taught with "provisional certificates," which is the term used by the district to designate emergency certificates. This amounted to 13.3 percent of the district's classroom teaching staff.

The statewide sanctions imposed on Idaho schools by the NEA for the 1967-68 school year will, no doubt, result in increased issuance of letters of authorization in the state. Such action tends to lower the status of the teacher as a professional person and consequently the morale of teachers in general.

An interesting sidelight to the consideration of teacher morale and the rather general feeling among teachers that the profession has low social status is a series of studies begun in 1925 by George S. Counts. Counts' purpose was to inquire into the social status of occupations. One reason he conducted the study was his interest in the prestige of the teaching profession. "Many have assumed," he said, "that the point has been reached in the degredation of the profession where one is justified in feeling some embarrassment if found within its ranks." The results of his study showed high prestige for the teaching profession.<sup>2</sup>

In 1946, Deeg and Paterson examined teacher prestige factors because of the social and occupational changes resulting from the Depression of the 1930's and World War II. Little change was found in occupational status rankings. 3

Again in 1967, after two decades of great social change, the problem was re-examined by Hakel, Hollman, and Dunnette. The prestige of the teaching profession was found to have increased slightly.

Telephone interview with Lois Jenkins, Personnel Clerk, Pocatello School District, August 27, 1968. (Provisional Certificates are legally issued in Idaho for those with less than a bachelor's degree but teaching in elementary schools.)

Milton D. Hakel, Thomas D. Hollman, and Marvin D. Dunnette, "Stability and Change in the Social Status of Occupations Over 21 and 42 Year Periods," The Personnel and Guidance Journal, XLVI, No. 3 (April, 1968), 762.

<sup>&</sup>lt;sup>3</sup><u>Ibid</u>. 4<u>Ibid</u>., p. 763.

There was a striking similarity between the three sets of prestige rankings.1

1925	1946	1967
1. Banker	Physician	Physician
2. Physician	Banker-Lawyer	Lawyer
3. Lawyer	Banker-Lawyer	Superintendent of Schools
4. Superintendent of Schools	Superintendent of Schools	Banker
5. Civil Engineer	Civil Engineer	Civil Engineer
6. Army Captain	Army Captain	Elementary School Teacher
7. Foreign Missionary	Foreign Missionary	Foreign Missionary
8. Elementary School Teacher	Elementary School Teacher	Army Captain

It would appear that low social prestige as a factor in low teacher morale is an imaginary condition. A more realistic view of the problem is the previously quoted statement regarding the George Peabody College study of common causes of poor morale rather than low prestige among teachers.

#### Teacher Militancy

The militant spirit among teachers is largely a phenomenon associated with the 1960's. Most frequently the springboard to militancy is a quest for increased salaries.

#### And, again:

Teachers have helped create the affluence of today's society, yet their income ten years after graduation is less than that of many of their college classmates even though their services to society are fully as important.

Ibid., p. 764.

<sup>2&</sup>quot;Conditions of Work for Quality Teaching," NEA Journal, LIV (March, 1965), 33.

Our quest as teachers for higher salary is not mere status seeking. It is a quest to satisfy yearnings for the things which higher pay brings--books, plays, music, travel--and some leisure in which to enjoy them. We don't seek places for our children, but we do want to provide a comfortable home and to be financially able to send them to college.

Must we moonlight to provide these things? The tragedy is that the time and energy we must spend selling kitchenware or working in a filling station is keeping us from doing our best in the classroom, self-respect as teachers begins to fade. Once this happens, we feel forced to take strong, overt action to win it back. We become militant.

Teachers who are no longer satisfied to accept administrative decisions regarding salaries are also questioning school policies in general. Jerry T. Waddoups, in his Master's thesis, completed in 1967, states:

Teacher militancy has been increasing continually over the past few years. Teachers have asked for, and in some cases demanded, a part in local district educational planning and policy making. They have sought to be consulted with regards to salary, working conditions, and curriculum development. Teachers have united in professional associations to seek better working conditions, better salaries, and more favorable educational climates. These professional associations have attempted to establish bargaining procedures with local boards of education. One of their requests was to ask that boards of education conduct collective bargaining elections to determine which organization teachers desired to represent them in collective bargaining; however some local boards have not been willing to allow such elections to be held. When boards refused to hold these elections, teachers have attempted to force action by strikes, professional holidays, boycotts, recesses, and selective work stoppages.2

Another form of militancy is that of imposing "sanctions" on a local district or on a state. Developed by the



Richard D. Batchelder, "Today's Militant Teachers," NEA Journal, LIV (September, 1965), 19.

Jerry T. Waddoups, "Teacher Militancy: A Case Study" (unpublished Master's thesis, Department of Education, Idaho State University, Pocatello, 1967), p. 1. (The reading of this entire thesis is recommended for those interested in a thorough review of militant actions of teachers prior to 1967 and in an historical examination of professional negotiations as adopted and developed by the NEA at its national conventions.)

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National Education Association, the sanction policy provides that a local unit or a state association requests such action. When the causes have been studied by a responsible agency of the state or national association with recommendations for correction, and when reasonable time has been given for action by the school authorities, the Personnel Standards Commission of the Association may recommend to the board of directors that it apply sanctions to such a district or state. If sanctions are imposed, the state or national association has usually declared that the school district or state does not maintain conditions conducive to professional service of its teachers. The information about a sanction is widely distributed through all news media. All placement offices in the country are notified of the sanctions and the reasons for them. Teachers who disregard the sanctions are considered unprofessional in their conduct.1

Corey defended the use of sanctions by stating that:

Several advantages of sanctions are immediately apparent. . . . The basis of influence and pressure on the part of the teachers is immensely broadened. The participation [of state and national groups] in the process precludes capricious and hasty action. There is no immediate cessation or diminution of educational service to children and no breaking of contracts. Sanctions can be controlled within the profession and do not involve teachers in legal processes and procedures which are not appropriate to public employment.<sup>2</sup>

In Idaho, teachers had long been dissatisfied with salary and working conditions.<sup>3</sup> The 1965 passage of a sales tax law and the subsequent referendum in 1966 were due, in part, to the vigorous campaign waged in its favor by educators who understood that the increased revenue gained from the tax would be used to improve Idaho's schools. For the first year after the sales tax became law, the schools received increased appropriations, most of which were used to raise teachers' salaries. In 1967, however, sales tax monies were diverted to other purposes—one of which was to fund a teacher retirement system. Comparatively small increases were appropriated to the public

<sup>1</sup>Arthur F. Corey, "Strikes or Sanctions?" <u>NEA Journal</u>, LI, No. 7 (October, 1962), 15.

Ibid.

3A detailed study can be found in: Idaho: A State-wide Study of Educational Conditions and School Finance, Report of a Public School Study, National Commission on Professional Rights and Responsibilities, National Education Association (Washington, D.C.: NEA, January, 1965).

school fund. The long-time frustration and dissatisfaction of Idaho teachers with the educational situation in the state culminated in the following policy adopted by the 74th Idaho Education Association Delegate Assembly in March, 1968.

SANCTIONS

WHEREAS, the State of Idaho has failed to provide adequate funds for education;

WHEREAS, the State of Idaho used sales tax funds for other purposes than financing education and has placed the burden of supporting the public schools back on the local property taxpayer;

WHEREAS, education primarily is an obligation of the state:

WHEREAS, state support currently is approximately 40% instead of 50% as long advocated by both political parties;

WHEREAS, consultive and educational services provided in Idaho do not compare favorably with those of our neighboring states;

WHEREAS, Idaho's salaries are rapidly becoming a statewide disgrace, and;

WHEREAS, an increased number of Letters of Authorization continue to be used in circumvention of law;

THEREFORE. BE IT RESOLVED:

That a censure sanction be applied in Idaho effective immediately. Censure sanctions shall be interpreted to mean:

- a. Censure of the State of Idaho for failing to meet its constitutional responsibility to public school education.
- b. Prompt notification of all teacher placement groups, universities, colleges, education departments, education student groups, and school trustees or superintendents in the Northwest and neighboring states regarding the sanction.
- c. Under the provisions of the censure sanction the following employment policies or procedures apply:
  - It is an unprofessional and unethical act for a person not currently contracted to teach in



Idaho to apply for or accept a teaching assignment in the state.

- 2. Any teacher currently employed by an Idaho school district may accept an initial teaching contract in another school district through April 1, 1968.
- 3. Students presently enrolled in a Teacher Education Program in an Idaho institution of higher education may sign an initial contract to teach provided they are qualified for a Standard Idaho Certificate.
- 4. No IEA member may accept a position in a school district which has retaliated against teachers because of professional association activities until the IEA office certifies that corrective action has been taken.

Professional sanctions in the State of Idaho were invoked officially on March 21, 1968. They will remain in force "until in the professional judgment of the Idaho Education Association, the State more adequately meets its constitutional responsibility to public school education."<sup>2</sup>

As Idaho teachers fight for quality in education and for their own futures in the profession, it must be realized also that future gains may be achieved through immediate loss strategies. That is: How many teachers will leave Idaho as the result of the sanction? How many "letters of authorization" will have to be issued to staff the schools? How many cases of the misassignment of teachers will occur due to a shortage of adequately prepared personnel? How long will it take the educational system of Idaho to recover from the present situation? What will be the cost of sanctions in educational losses? All these questions are worthy of systematic study, but are, obviously, beyond the scope of this report.

The schools, in the judgment of many people, fall too far short of their potential. Certainly, at present, Idaho's schools are guilty of that inadequacy. Perhaps the result of the militant action taken by Idaho's teachers will be to provide an educational system in the future where high quality teachers and improved working conditions, will insure higher quality educational opportunities for young people.

The Newsletter, op. cit., p. 1.

<sup>&</sup>lt;sup>2</sup>Notice of Professional Sanctions in the State of Idaho, Delegate Assembly of the Idaho Education Association, 1968.

#### CHAPTER 6

#### SUMMARY OF FINDINGS FROM THE QUESTIONNAIRE SURVEY

#### I. STATISTICAL ANALYSES OF SELECTED FACTORS

To determine whether selected factors were "statistically significant," the chi-square test of independence in contingency tables was employed. The term "statistically measured" means that observation: are quantified using specific procedures to describe or analyze observations that have been made or data that have been collected. In this manner, statistical inferences differ from qualitative observations, such as assumptions or value judgments. The chi-square contingency technique used in this study is described by Henry E. Garrett in Statistics in Psychology and Education. I The .01 level was established by us as the accepted level of significance. A summary of each finding that was statistically measured follows. 2

#### Age Distribution

1. It was statistically significant at the .01 level that there was a difference in the age distribution between the males and females responding to this study.

This means that the differences in age distribution between male and female respondents were not those which one would normally expect to find. The difference, however, was that the male respondents who left their 1967 positions were older than the females. The calculated median was 32 years of age for males and 27 years for females. This is surprising as the reader should recall that the calculated median age for all Idaho male teachers was 37. The findings

Henry E. Garrett, Statistics in Psychology and Education (6th ed.; New York: David McKay Co., 1966), pp. 262-

<sup>2</sup>The term "statistically significant at the .01 level" means that the findings could happen by chance alone one time out of one hundred samples of the population. The .01 level of significance is generally regarded as an excellent indicator that the index of measurement is trustworthy. Findings reported as being significant at the .05 level also indicate that a significant difference exists between the groups being measured. However, the difference at the .05 level means that the odds are such that an event could happen give times out of 100 due to chance alone. At the .01 level the chance factor would be reduced to one event per 100 times.

of this study indicate that the female respondents who left their teaching positions were younger than the males.

This is the first time such an age reversal has been noted in Idaho teacher turnover studies. An opposite difference was found in the age distribution between males and females who responded to the 1963 and 1965 Idaho teacher turnover studies, i.e., the females were older. It might be inferred that female teachers who leave their teaching positions are now being drawn from the young entry group. Refer to Table 4-3 to note the influx of rather young women. If this is so, Charters' and Whitener's "First five year mobility" hypothesis is being substantiated in Idaho. This appears to be verified because the median number of years of total teaching experience for both women and men at the end of 1966-67 would be from 3 to 5 years.

- 2. There was no significant difference between the age distributions for male turnover teachers who remained in Idaho when compared to those males who left the state. The level of significance was .02 (approaching .01, but not accepted in this survey). It appeared that the median age for all male respondents was about 32 years.
- 3. There was no significant difference between the age distribution of females who stayed in Idaho and females who left the state. Statistically, there was no significant difference in the age distribution between females who stay in Idaho and females who leave the state. However, the apparent median age for females who left Idaho was 27 years; while the median for females remaining in Idaho appeared to be 32 years.

In this survey, 532, or 64 percent, of all respondents were between the ages of 20-34 years. Included in these 532 teachers were 293 persons who left the state. The 293 persons accounted for 69 percent of all the 425 teachers who left Idaho, or 35 percent of the entire group participating in this study. Idaho continued to lose (at even a greater rate than in 1963 or 1965) from an age group which is already proportionately less for Idaho than is the national average.

Donald C. Orlich, Evelyn M. Craven, and R. D. Rounds, Teacher Turnover in Idaho Public Schools: 1963 (Pocatello: Idaho State University, July, 1964), pp. 57-58; and Donald C. Orlich, David L. Crowder, and R. D. Rounds, Idaho Teacher Mobility: 1965 (Pocatello: ISU, July, 1966), pp. 62-63. Hereafter these studies shall be referred to as the 1963 and 1965 studies respectively.

#### Family Information

There was a significant difference in the marital status between men and women, with greater proportions of male respondents being married. As a total group, 688 respondents, or 82 percent, were married.

Also, significantly different was the marital status between females who left Idaho and those who remained in Idaho. A greater number (38) who left the state were single females than those who moved intrastate (19). Seventy-eight percent of all responding females (343) were married.

There was no significant difference in the marital status of men leaving or staying in Idaho. Eighty-seven percent (345) of all responding males were married--a nine percent greater difference than the females. Twenty-eight single males left Idaho while ten single males moved within Idaho.

There was no significant difference at the .01 level in the numbers of dependents under 18 years of age for those respondents leaving or remaining in Jaho. (This distribution did reach the .02 level of significance.) Likewise, there was not a statistical difference in the total number of dependents for those remaining or leaving Idaho. (The distribution reached the .05 level.)

It appeared that there was a greater proportion of married males than females participating in the study and that a greater proportion of married females remained in Idaho than those who left. There were apparently no differences in the number of dependents for those respondents who left Idaho or those who remained.

#### Academic Preparation

- 1. There was a difference in academic preparation between male and female respondents (bachelor's degree vs. non-bachelor's degree) which was statistically significant at the .01 level. Male teachers who left their 1966-67 positions tended to have at least a bachelor's degree with greater frequency than did the female counterparts. In other words, the responding males had better academic preparation than did the females. This finding was also reported in the 1963 and 1965 teacher turnover studies.
- 2. There was no significant difference in academic preparation (bachelor's degree vs. non-bachelor's degree) between the females remaining in Idaho and those leaving. Although females were less well academically prepared as a group than males, there was no apparent academic difference between the female teacher who left the state and the one -110-



who stayed. In 1963 there was no significant difference between these two female sub-groups with reference to academic preparation. In 1965 the females who left Idaho were better prepared than those females who remained in Idaho. The change can be interpreted to mean that the Idaho State Board of Education teacher education standards are helping to improve teacher preparation in the state.

3. There was no significant difference between the academic preparation (bachelor's degree vs. non-bachelor's degree) of the males who left Idaho and the males who remained in the state.

This finding parallels that observed above for the females in number 2. From the findings of the 1965 study, it appeared that the male who left the state of Idaho tended to have at least a bachelor's degree with greater frequency than males remaining in Idaho. There was a proportionately greater incidence of men with degrees leaving Idaho than there was of men with degrees remaining in Idaho. A similar finding was reported in the 1963 teacher turnover study.

The question concerning academic preparation (number 6 in the questionnaire) must be changed in subsequent studies. The quantitative aspects will no longer discriminate between groups. Other quantitative criteria appear to be needed.

We compared the same two groups--(1) males leaving Idaho and males staying in Idaho, and (2) females leaving Idaho and females staying--on the differences in preparation with a bachelor's degree versus a master's degree or beyond. There were no significant differences observed in either grouping. This means that the proportion of males and females holding bachelor's and master's degrees is that which one would expect to find in the given distribution of the trait.

All these data give evidence which support the observable increase in academic preparation by Idaho teachers who are mobile. These findings were not observed in the 1963 and 1965 studies. The reader is referred to Tables 4-4 and 4-5 to note how members of the Idaho teaching corps have gradually improved their academic preparation between 1962 and 1967--a commendable feat.

#### Salary Differentials Among Respondents for 1966-67

In order to determine whether there were any statistical differences between three different sub-groups within the study, the respondents' reported 1966-67 salaries were compared.

1. There was a highly significant difference between the reported 1966-67 salaries for males and females (much greater than the .001 level). This was the year that all respondents taught in Idaho.

The males as a group reported a greater salary for their 1966-67 positions than did the females. The reported median range for males was between the \$5500 to \$5999 category. The reported female median fell in the first category listed, "under \$5,500." This was surprising because our data showed a significant difference in the experience factor, with females tending to be more experienced than the male respondents. We would speculate that there might be three logical explanations: (1) males have more opportunities for extracurricular pay than do females; (2) there is some sex-type pay discrimination even though the single-salary schedule has been almost universally adopted in Idaho school districts; or (3) there was some respondent confusion in checking question 31 of the survey information: "Annual Salary from Prime Occupation. . . ."

The reported salary distributions for all respondents showed a statistically significant difference (much greater than .01) for 1967-68 salaries between all males and all females. The reported median category for males was in the \$6500-\$6999 bracket; while the female median category was \$500 less, \$6000-\$6499.

- 2. There was a significant difference between the reported salary distribution of males who remained in Idaho and the reported salary distribution of males leaving the state for 1967-68, regardless of job held. Males leaving Idaho reported a median salary bracket of \$7000 to \$7499. Males who remained, but moved within Idaho, reported salaries which were clustered in the \$6000 to \$6499 bracket as a median category. This salary difference was found in the 1963 Idaho study, but was not identified in the 1965 study. This could be interpreted that in 1965 the teacher salary increases improved salary conditions to a high degree. Since 1965, the salary increases in Idaho have not equalled that raise.
- 3. Significant (at the .01 level) was the difference between the reported salary distribution of females who remained in Idaho and females who left the state for 1967-68, regardless of jobs held. The same finding was reported in both the 1963 and 1965 Idaho teacher mobility studies. Those women leaving Idaho reported 1967-68 salaries which had a median in the \$6000 to \$6499 category, i.e., \$500 greater than that computed for women remaining, but changing jobs or careers in Idaho.
- 4. There was a highly significant difference (greater than .001 level) between the reported 1966-67 and -112-



1967-68 salaries for all males who responded to the survey. The 1966-67 median was found in the \$6500 to \$6999 cagegory-a reported gain of \$1000 in the one year for 1967-68 salaries.

- 5. Female respondents reported a similar difference; for it was highly significant (greater than .001 level) that there was a difference between the reported 1966-67 salaries and those reported for 1967-68. The median category for 1966-67 was "under \$5500," but for 1967-68 the median category was \$6000 to \$6499. Twenty-six females reported \$7500 or greater for 1967-68, with four females reporting that figure in 1966-67. Eighteen of the twenty-six females were living out of Idaho during 1967-68.
- 6. To test the reported salaries of all those males who remained in teaching during 1967-68, we screened out all males who reported that they were not teaching in 1967-68. The salary distribution of teaching males was then tested by chi square. There was a very highly significant difference between the reported 1967-68 salaries of males working in the public schools but who left Idaho and those teaching males who remained. Males leaving Idaho reported incomes with a median falling between \$7000 and \$7499. Males teaching in Idaho collectively reported salaries that fell \$1000 below their out-of-state colleagues--\$6000 to \$6499. Forty-three males leaving Idaho reported salaries of \$8000 or more, while ten males who remained in Idaho reported such a salary.
- 7. Significant at the .01 level was the difference in the reported 1967-68 salaries between all females who were teaching in public schools, but who had left Idaho and those females remaining in Idaho. The median salary category for out-of-state females was between \$6000 and \$6499, while the median for females teaching in Idaho was \$5500 to \$5999--a \$500 difference. Further, 17 females leaving Idaho reported salaries of \$7500 or beyond. Three females moving within Idaho reported salaries in that range. Findings similar to number 6 and number 7 were also reported in the 1963 and 1965 studies.
- 8. Medians for the reported salaries of males not working in public schools, for those males who left Idaho and those males who remained in Idaho were identical--\$7000 to \$7499. (We did not treat these data statistically because of too few cases in each chi-square cell.) The median was \$1000 above that found for males who remained in, but continued teaching in Idaho.

A parallel situation existed for female respondents not working in the public schools. The salary median for all females who left teaching and either left Idaho or remained in Idaho was between the \$5500 to \$5999 interval. This figure equalled the reported median teaching salary of

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Idaho females for 1967-68, but was \$500 less than the reported median salary of females who were teaching outside of Idaho.

Figure 14 illustrates the apparent median salary levels in \$1000 intervals, for males and females who taught in Idaho during the 1966-67 school year and either moved within Idaho or moved out of the state after the 1966-67 school year. (The median is that point above which and below which lie 50 percent of the cases.) All salary data used in Figure 14 were taken from responses of individuals as they were reported on questions 30 and 31 on the survey instrument (see Appendix A). Only data from respondents who were teaching in 1967-68 are included in Figure 14.

Those who moved within Idaho or out of the state after the 1966-67 school year tended to report an increase in their 1967-68 salary. The apparent median for females who moved out of the state was a \$500 interval higher than females who moved within Idaho. The males of either subgroup tended to report a greater salary than females within that sub-group. (The sub-groups were those moving within Idaho and those leaving the state.) Males moving within Idaho reported \$500 salary gains and those leaving the state reported salary gains with the apparent median interval of a gain of \$1500 over their 1966-67 positions.

Teachers are paid in accordance to their academic preparation and number of years of teaching experience. Thus, a portion of the 1967-68 salary increases reported in this study would be reflected by movement into an experience bracket of one additional year. This would not be so for all cases, since most school districts will not usually allow over five to eight or ten years experience on the salary schedule for those who enter the districts with experience not earned in that district. Salary policies vary throughout the state and nation, hence generalizations, other than those stated above, would be difficult to summarize.

check the "one" most important factor that influenced their moving. The factor checked most often was "Personal Reasons.

"Two hundred and sixteen respondents checked that item. Further analysis showed that 138 respondents were females, or 64 percent of the group who checked "other" as being the one most important fact which influenced their decisions to leave their 1966-67 positions. One hundred and sixty-two (19 percent) of the respondents checked "Economic Necessity" as being primarily responsible for their decisions to change positions. However, 126 of the 162 respondents (78 percent) checking "Personal Reasons" were males.

"Husband (or wife) changed employment" was listed as the one most important reason by four males and 104 -114-



all male respondents, 1967-68. Median salaries of within moved Idaho MALES who all female respondents, 1967-68. Median salaries of FEMALES who Idaho moved from FEMALES within moved who Idaho responded to survey. taught in Idaho, MALES of teachers who Median salaries 1966-67, and FEMALES Reported Salaries (High Median) 0 \$4000 \$1000 \$3000 \$2000 \$6000 \$5000 \$9000 \$8000 \$7000

MALES

moved

who

Idaho from

Figure 14. Comparison of Apparent Median Salaries Reported by Males and Females Who Taught in Idaho in 1966-67 and Either Moved within Idaho or Moved out of the State of Idaho, but Who Remained in Teaching during 1967-68.

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females. Nine respondents checked "Did not enjoy teaching." Fifty-six respondents checked "Administrative and/or Super-visory" factors as being most influential to leave. Thirty respondents checked "Critical difference of opinion with administrator" as being a primary reason for leaving.

A summary of written comments on question 36 showed that of the 52 male respondents checking "other" as the basic reason for leaving, 25 respondents mentioned advancements to other jobs or educational positions; 18 cited other (than those listed) personal reasons; and 9 respondents commented on the non-availability of a job or not being offered a contract.

Female respondents who wrote in a major reason under "other" cited educational advancement in 14 cases; 49 had personal reasons (with "retirement" listed by 36); and one female stated she was not certified for the position she held, i.e., misassignment.

- 10. We desired to test th∈ significance of the number of years the respondent had taught as of May, 1967. The following comparisons were all significant at the .01 level.
  - a. Males leaving Idaho versus males remaining in Idaho. The median number of years of teaching in Idaho was 2 to 3 for males who left the state, and 4 to 5 years for males remaining in Idaho.
  - b. Males leaving Idaho versus males remaining in Idaho with the variable being the total number of years of teaching experience. In both cases, the median number of years of teaching experience was 4 to 5 years. Yet, there were a greater proportion of males who left the state with 1 to 3 years teaching experience.

We would interpret these data to mean that young men seem to obtain 2 or 3 years teaching experience in Idaho and leave the state. This factor was not observed to be so pronounced in the 1963 and 1965 studies.

c. Females leaving Idaho versus females remaining in Idaho. This sub-group showed significant difference in Idaho teaching experience. Those leaving the state tended to have had fewer years of teaching experience than those remaining. The medians were identical (2 to 3 years) for each group, but those who left had fewer total years of experience as a group.

- d. The number of years that all males and all females taught in Idaho. This distribution showed a statistically significant difference. The median for both groups was 2 to 3 years teaching experience in Idaho, with females tending to have a greater number in the 1 to 5 year ranges than males.
- e. Females leaving Idaho and females remaining in the state. Females leaving Idaho had no statistically significant difference over those females remaining in Idaho when comparing total number of years of teaching experience. The median for both groups was in the 4 to 5 year bracket.

The above would tend to substantiate that women tend to move within the first five years with about the same magnitude as do males.

## II. SOME GENERAL ASPECTS OF THE 1966-67 IDAHO TURNOVER TEACHERS AS TABULATED FROM RESPONSES ON PARTS I AND II OF THE QUESTIONNAIRE

- 1. Approximately 47 percent of those responding had either received their degree in Idaho or if non-degreed, had completed education courses for a teaching certificate in Idaho. The remainder had received either their degree or education courses from institutions out of the state. Since there is no accessible way at this time to compare these data with the total teaching force in Idaho, it remains unknown whether a teacher who receives his higher education out of state tends to remain in Idaho for a shorter period than does the teacher educated within the state.
- 2. Of those who responded to question 9--location of higher education-395 received their higher education or teacher certification in Idaho. This accounted for 47 percent of the total. Thus, 53 percent of the respondents received their higher education out of state. The largest single group of out-of-state prepared teachers came from Utah schools. Nearly one-fifth (19.4 percent) received college work in Utah. Thirty-four percent of the respondents attended colleges and universities elsewhere in the country.
- 3. The males tended to teach in the secondary schools, with 83 percent of those responding teaching in either junior or senior high schools (7-12) and 13 percent teaching in the elementary schools (K-6). Four percent had other primary responsibilities, typically administrative or supervisory.



Females showed an orientation opposite that of the males. Of the females, who responded 55 percent taught in elementary schools (K-6) while 44 percent taught in junior or senior high schools (7-12). The remaining one percent had other basic responsibilities.

4. The out-of-state migration appeared to be greater than that reported in 1965 or 1963, as 386 persons left the state; while 410 respondents stated they remained in Idaho. Thirty-nine persons did not indicate thele 1967-68 locations. Table 6-1 shows the 1967-68 locations for those who responded. In other words, 49 percent of those completing this item indicated they were living in Idaho during the 1967-68 school year. Forty-six percent of the respondents left the state. In the 1963 Idaho teacher turnover study, 50 percent of the respondents moved out of Idaho, accounting for 356 persons, while 41 percent left the state in 1965 (252 teachers).

TABLE 6-1

STATE OF 1967-68 RESIDENCE FOR IDAHO TEACHERS CHANGING OR LEAVING THEIR POSITIONS AT THE END OF THE 1966-67
SCHOOL YEAR

State	Number	Percent of Total
Idaho	410	49.0
Oregon Washington Utah California Montana Nevada Colorado Arizona Alaska Wyoming	78 75 61 33 18 15 11 9 7	37.0
All other states or countries Sub-total	<u>75</u> 796	9.0
Not Reporting Totals	39 8 <b>3</b> 5	5.0 100.0

Note: Of the 796 respondents who reported their 1967-68 locations, 410 or 49 percent remained in Idaho. The other 386 respondents, or 46 percent, reported that they left the state of Idaho prior to the beginning of the 1967-68 school year.

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It is of interest that 311 or 81 percent of the responding teachers leaving Idaho remained in the eleven western states of Alaska, Ārizona, California, Colorado, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. In the 1963 and 1965 Idaho State University teacher turnover studies the five states of Washington, Oregon, Utah, California, and Nevada held identical places as recipients of Idaho teachers. Further, in the 1960 and 1962 studies, Washington and Oregon were the two leading states to which Idaho teachers reported migrating. edged Washington out of first place during 1967. A definite pattern is established that teachers who leave Idaho choose the Pacific Northwest as first choice, followed by Utah, California, Montana and Nevada. Since there appears to be a strong "Utah" influence exerted on Idaho teachers, it is surprising that more do not migrate to that state. Table 6-2 for a total recapitulation of 1967-68 residences of all those responding to this study.

The mobility pattern of Idaho teachers leaving Idaho was similar to the general out-migration of Idahoans, in general. According to the U.S. Bureau of Census, residents who are born in Idaho and leave the state migrate to California, Washington, Oregon, Montana, Arizona and Colorado in that order for the first seven states—accounting for 75 percent of the out-migration.l These same states attracted the majority of Idaho teachers who responded to this study, but who left Idaho.

It was our intent to determine the origin of the in-migration of Idaho's mobile teachers. Table 6-3 presents the details. Of the 330 respondents who stated that they had moved into Idaho, 120 migrated from the seven Rocky Mountain States of Utah, Montana, Arizona, Colorado, Wyoming, Nevada, and New Mexico; while 119 migrated from the West Coast states of Washington, California, and Oregon--in the respective orders. Western states' in-migration accounted for 72 percent of those responding to the survey.

This in-migration pattern almost parallels that for Idaho population in general--as well as its out-migration. The states which supply in-migrates to Idaho, in order of percent, are: Washington, California, Oregon, Utah, Montana, Colorado, Wyoming, Nevada, Arizona, and New Mexico. These

U.S. Census of Population, 1960, Mobility for States and Economic Areas, PC (2), Table 16, pp. 74-77.

For a detailed discussion the reader is referred to Harry C. Harmsworth, Population Trends in Idaho, 1950-1960 (Moscow: University of Idaho, Department of Social Science, August, 1964).

### THE 1967-68 RESIDENCE OF IDAHO'S 1967 TURNOVER TEACHERS

By Frequency Alphabetically	
Tdaho 410	Alaska 7
Tuallo	Arizona
oregon	California 33
Washington	Colorado 11
Utah	Connecticut 2
Jailloinia 10	Idaho
riviicana.	Illinois 5
Nevada	Indiana
Arizona 9	Iowa 3
Alaska	Kentucky 1
Minnesota 5	Kansas
Indiana 5	Louisiana 1
Illinois 5	Massachusetts 1
New Jersey 5	Minnesota 5
Oklahoma 4	Missouri
Wyoming 4	Montana
Texas 3	Nebraska 3
Texas	Nevada 15
Nebraska	New Jersey 5
New York	New York 3
Wisconsin	New Jersey
Pennsylvania 3	OILLO
South Dakota	Oklahoma
Connecticut	Oregon
North Dakota 2	Pennsylvania 3
Ohio 2	South Dakota 3
Virginia 2	Tennessee
Missouri 1	Texas
Tennessee 1	Utah 61
Kansas 1	Virginia 2
Massachusetts 1	Washington
Louisiana 1	Washington, D.C 1
Kentucky 1	Wisconsin 4
Washington, D.C 1	WOULING
Foreign Countries	Foreign Countries
Canada 5	Australia
Guam 3	
Puerto Rico	England
Germany	England
DOD Schools Philippines 1	
England 1	DCD SCHOOLS THEE PP-110
Australia 1	Puerto Rico
706	Sub-total
Sub-total 796	Sub-cocur 1
Not Reported 39	NOT Reported
Total 835	Total

#### TABLE 6-3

#### STATES FROM WHICH TEACHERS MIGRATED INTO IDAHO AND THEN AGAIN BECAME MOBILE EITHER INTRASTATE OR INTERSTATE IN 1967-68

By Frequency	Alphabetically		
Utah 49	Alabama		
Washington 46	Alaska 2		
Commuter from Washington 1	Arizona 17		
California 37	Arkansas 3		
Oregon 36	California 37		
Montana 25	Colorado 14		
Arizona 17	Illinois 10		
Minnesota 14	Iowa 3		
Colorado 14	Louisiana 1		
Illinois 10	Michigan 2		
Nebraska 8	Minnesota 14		
North Dakota' 8	Maryland 2		
Wyoming 8	Mississippi 4		
South Dakota 8	Montana 25		
Texas 6	Nebraska 8		
Oklahoma 5	Nevada		
Nevada 5	New Jersey 2		
Mississippi 4	New Mexico 2		
Arkansas 3	New York 2		
Iowa 3	North Dakota 8		
Tennessee 3	Ohio 1		
Alaska 2	Oklahoma 5		
Maryland 2 Michigan 2	Oregon 36		
Michigan 2	South Dakota 8 Tennessee 6		
New Jersev 2	Tennessee 3		
New Mexico 2	Texas 6		
New York 2	Utah 49		
Alabama 1	Washington 46		
Louisiana 1 Ohio 1	Commuter from Washington 1		
Ohio 1 Foreign Countries	Wyoming 8 Foreign Countries		
British Columbia 1	British Columbia 1		
	Others, but not reported 4		
Others, but not reported 4	cences, see not represent		
Total 330	Total		

ten states supplied 68 percent of Idaho's general population in-migration.1

It would appear that the in- and out-migration patterns of Idaho's mobile (turnover) teachers closely follows that of Idaho's general population. We would speculate that the reasons for migrating to Idaho might be the same for teachers and the general in-migrant. This hypothesis should be tested by those interested in demography.

5. In observing the migration pattern of all teachers responding to this survey, there was an apparent movement from a smaller town to a larger one, from a smaller sized school district to a larger sized school district, and from a smaller sized school to a larger sized school. This identical observation was noted in the 1965 Idaho study.

Of 831 usable responses to question 17, "Type of Idaho Teaching Certificate Held," 169, or 20 percent of the respondents had either elementary or secondary provisional certificates. The group holding either elementary or secondary standard certificates accounted for 567 or 68 percent of the respondents. The remaining twelve percent of the total, held either special pupil personnel service or administrative certificates. The certificates held by respondents showed a marked improvement over all preceding studies.

7. In response to the survey questions 10-12, 100 percent of the respondents (835) listed their academic majors. Elementary education was the major for 173 of 438 reporting females. Forty percent of the females who left their 1966-67 Idaho teaching positions were teachers prepared in elementary education. This was a 27 percent decline in numbers (223) from 1965. The category of English ranked second, with 55 female teachers; home economics was third, with 33; "Teacher Education" was fourth, with 31; followed by physical education, with 22; and accounting with 17. These six categories accounted for 331 responses or 76 percent of all majors reported by females responding to the survey.

All 397 male respondents listed their academic majors. Physical education was the most reported single major, with 48 or 12 percent of the males reporting PE as their major field. However, as a composite field, all social sciences were listed by 75 or 19 percent of the total male group. Music was listed by 34 or 9 percent; with English and mathematics being listed by 28 respondents each; followed by elementary education which was listed by 25 males--representing 60 percent of all males responding to the survey. Table A-14 of Appendix C shows a total recapitulation of the major teaching fields reported by all



<sup>&</sup>lt;sup>1</sup><u>Ibid</u>., p. 54.

respondents as well as the reported teaching minor fields. Table A-15 lists the numerical codes used to code and identify majors and minors.

The academic minor fields listed most often by the female respondents were English, accounting, social sciences, music, and psychology. Male respondents reported in descending order, academic minors of social sciences, English, accounting, physical education, and mathematics.

- Relating closely to teaching major and minor fields is the problem of teacher assignment. There appeared to be wide-spread utilization of the respondents in their major and minor fields. In the 1966-67 school year, 484 of the 795 respondents, or 61 percent, reported teaching at least half-time in their major areas of academic preparation. For the 1967-68 school year, (see Table A-12) 313 of the 522 respondents, or 60 percent, to whom the question was applicable reported at least half-time teaching assignments in their major area of academic preparation. From the data reported in questions 28 and 29 (Table A-9 of Appendix C), it appeared that gross misassignment of teachers accounted for about 11 percent of all those responding. This figure was obtained by isolating 54 respondents of 486 applicable replies who stated that they were not teaching in either a major or minor field.
- 9. Of 800 respondents completing question 35, 271 or 34 percent of the group indicated that the position which they left at the end of the 1966-67 school year was their first teaching position. One hundred sixty-eight of these same 800, or 21 percent, indicated that they had taught in Idaho previously, but in another district. The data for items 8, 9, and 10 above closely parallel the findings of the 1963 and 1965 studies.

#### III. DETERMINING IDAHO'S TEACHER LOSS

As was discussed earlier, estimates regarding the national average for teacher loss ranges from 8.5 and 10.9 percent. To determine the apparent teacher loss for the 1967-68 school year, we studied the responses to question 34 (see the questionnaire, Appendix A). A single response item would indicate whether or not a respondent was teaching. A total of 462 or 55 percent of those responding stated that they were working in public elementary or secondary education during the 1967-68 school year. However, 349 or 42 percent of the respondents indicated that they were not teaching during the 1967-68 school year. percent did not respond to the item. These data would indicate that about 42 percent of all respondents withdrew from teaching in Idaho at the end of the 1967-68 school year! This could mean that the Idaho teacher loss or withdrawal rates for 1967 were almost four times as great as the national average. -123-

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We requested that the respondents list their occupations if not teaching during 1967-68. The greatest number listed (111) was "housewife." The second most frequent response was "student," which was listed by 39 respondents. Forty-seven persons listed educational related occupations, such as, substitute teaching, administration, other type of non-public school teaching, and state department of education work. Twenty-two respondents went into business or business-related occupations, while 16 persons stated that they were engaged in college teaching. A rather similar pattern also existed in 1965. See Table 6-4 for a complete recapitulation of the occupations which 1966-67 teachers stated that they entered in 1967-68.

Although these findings are far from being conclusive, they do indicate that the respondents did not drastically change their occupational orientations. All respondents were in the field of education during the 1966-67 school year. Those who indicated a change of occupation during 1967-68, for the most part, remained in social or governmental service oriented occupations. It is common speculation that persons who leave teaching take positions in the business sector. The findings of this survey do not substantiate that popular assumption.

In the 1964 teacher turnover study, 38 percent, i.e., 276 or 726 respondents, reportedly withdrew from teaching. Of the 276 withdrawals from teaching, 111 or 40 percent were females who collectively stated that their major reasons for moving were matrimony, family mobility (spouse's moving) and maternity. The males who were classified as a teacher loss in the 1965 study quit teaching primarily because of economic factors. Of the 97 males who reported that they left teaching, 62, or 64 percent of the total, apparently did so because of insufficient salary. The second major cause for male teacher loss was to return to college. The latter group might well have been considered as a temporary loss, for several stated that they were furthering their education to "move" ahead in the field of education.

There is a parallel between the groups who stated that they left education for the 1962-63 and 1964-65 respondents. Females apparently withdrew from teaching for three primary reasons: family mobility (spouse's moving), maternity, and returning to college, respectively. Insufficient salary appeared to be the primary reason for male teacher loss. The second most stated reason for males not teaching during the 1965-66 school year was to return to college.

The data in Table 6-4 would indicate that the apparent teacher loss of Idaho teachers is 42 percent. This is not, however, truly accurate. A total of 75 persons (college students and student teachers will undoubtedly -124-



# TABLE 6-4 OCCUPATIONS WHICH WERE ENTERED IN 1968 BY IDAHO TEACHER WITHDRAWALS IN 1967

Major Occupation Group	Number Entering	Occupation
Major occupation diddp	Male	Female
Housewife		111
Professional, Technical, & Kindr	red	
Authors	2	2 2
Clergymen		2
College Instructors	16	4
Engineers	2 1	2
Musician	ı	2 3
Social, Welfare, & Recreation		•
Teachers		1
Tutorer		4
Kindergarten Substitute		27
Parochial		2
Teaching Assistant		2 1
Teacher University Lab School		T
Educational Related Fields	4	
Educational Administration	·	
Education Related Fields (Stat	te Government)	
Employment Vocational Counsel	Lor	
Vocational Rehabilitation	1	
Employment Consultant	ī	
U.S.F.S. Teacher Job Corp Reading Teacher	ī	
State Dept. of Ed. Music Cons	sultant l	
Technicians	_	•
Medical and Dental	1	3
Other Professional, Technical	, & Kindred	
Golf Professional	1	
Geologist	1	
Economist	i	
Psychologist	_	
Farmers	3	
Managers, Officials, & Propriet	ors (Excluding F	armers)
Self employed cafe operator	<u> </u>	
Self employed liquor store op	erator 1	
Salaried	•	
Personnel Management at Amer	rican 1	
Potato Company Tech Managor Its System	ī	
Tech. Manager Jts. System Business Management	ī	
First Security Bank	1	
Schedule Plans Boeing Compar	1y_ 1	
-1	L25-	



TABLE 6-4 (Continued)

More an Occupation Chaup	Number Entering	Occupation
Major Occupation Group	Male	Female
Clerical and Kindred Workers	•	
Grocery Clerk	1	1
Credentials Analyst		1 4
Secretary		4
Sales Work	•	
Insurance Salesman	2 1	
Underwriters	1	3
Real Estate		3
Other Specific Sales Work	•	
Medical Representative	1	
Agricultural Representative	1	
Factory Representative	1	
Craftsmen, Foremen, and Kindred		
Mechanic	2	
Museum Curator	1 3 1	
Computer Programmer	3	
Electrician	1	
Building Contractor	1	
Student		
College Student	<b>3</b> 9	28
Student Teaching	8	
State Government Agencies		
U.S. Senate	1	
Executive Director, Lava Hot		
Springs Foundation, State of		
I <b>da</b> ho	1	
Federal Government	,	
U.S. Army	<b>3</b>	
PERT Analyst	3 1	
U.S.F.S. Fire Dispatcher	1	
Grand Totals	117	200

return to teaching—in or out of Idaho). Thirty—two females were engaged in teaching as substitutes or others and four were in administration. The total number of persons in these categories is 111. Thus, 32 percent of the claimed withdrawals will probably return to teaching. The actual withdrawal figure for Idaho teachers responding to our survey would approach 238 or 29 percent of all respondents—which still remains three times above the national rate.

IV. TEACHERS' REASONS FOR LEAVING THEIR 1966-67 POSITIONS AS DETERMINED FROM PART III OF THE QUESTIONNAIRE

#### Manner of Presentation of Data

Data from Part III of the questionnaire concerned teachers' reasons for leaving their 1966-67 positions in Idaho schools. The data are presented in tabular form in Tables A-18 through A-21 in Appendix C. Both number and percent marked for "N, S, M, D" are noted for each question in each of the six major areas of influence. For example, Table A-18, "Critical Index for All Males," is read as follows:

In the tabulation for area one, "Administrative and Supervisory Factors," the number to the left is equivalent to questionnaire items thirty-seven through forty-one respectively. Item 37 was checked by 247 male respondents as having had "no influence" (N) on their decision to leave their positions; 47 male respondents noted "moderate influence" (M); and 36 noted "decision influence" (D). The percentage of respondents marking "N, S, M, D" were 68 percent, 13 percent, 8 percent, and 9 percent, respectively. (The computer truncates the decimals, thus totals are slightly below 100 percent.) In the column titled "Total" is given the total number of respondents replying to each question, in this case 361. The figure 217 in the column titled "Weight" is the sum of the numerical values assigned by the study team to quantify the response patterns. Each possible response (i.e., N=0, S=1, M=2, D=3) was multiplied by the number of respondents making a particular reply. The assigned weight of item one is 217, which, when compared to the weight of the other items in the major area, "Administrative and Supervisory Factors," shows that question 37 was fourth in total importance in that group as a factor influencing all male teachers' decisions to leave their 1966-67 positions. Further comparison of the weight of question 37 with the weight of items in other major areas of influence is then possible.

#### Responses of Male Turnover Teachers

Table A-18 in Appendix D lists the total number, percent, and weight of all male responses to Part III of the questionnaire. The ten factors listed as being most influential in the decisions of the 363 male respondents who resigned their teaching positions in 1966-67 were:

1. Salary insufficient.\*1

- 2. Future outlook for improvement in working conditions too discouraging.\*
- 3. Inadequate community financial support of schools.\*
- 4. Other states paid higher salaries.\*
- 5. Lack of opportunity for advancement.\*
- 6. Salary schedule not related to merit.\*
- 7. Lack of teaching aids, materials, and equipment.\*
- 8. No financial future in teaching.
- 9. Desire for change (adventure).
- 10. Lack of time for planning, preparing, and evaluation of pupil educational activities.\*

Of the ten items listed above, six relate directly to economic factors and three relate to working conditions. Collectively these nine items have fiscal implications.

#### Responses of Female Turnover Teachers

Data for the responses made by 438 female turnover teachers are listed in Table A-19 in Appendix C. The ten most influential factors in womens' decisions to leave their 1966-67 teaching positions were:

- 1. Spouse's move prompted leaving the position held in 1966-67.\*
- 2. Salary insufficient.\*
- 3. Future outlook for improvement in working conditions too discouraging.\*
- 4. Family moved or plans to move.\*
- Lack of time for planning, preparing and evaluation of pupil educational activities.\*
- 6. Other states paid higher salaries.\*



The asterisk (\*) indicates that the specific statement appeared in the first ten reasons during both the 1963 and 1965 studies. This code will be used for female responses, those respondents leaving Idaho, and those remaining in Idaho.

- 7. Too little relief from pupil contact during the day.\*
- 8. Actual or pending marriage or need to take care of home.\*
- 9. Inadequate community financial support of schools.
- 10. Lack of teaching aids, materials, and equipment.\*

"Spouse's move" was the first major factor influencing women to leave their positions. Reasons 2, 3, 5, 6, 9, and 10 all appeared on the listing for male respondents. In both cases the order of importance varied between those given by the males and those reasons given by female respondents. It is important to observe that reasons 1, 4, 7, and 8 given by women do not appear among the ten most influential factors listed by male respondents. Three of these four reasons are from the major category, "Personal and Family Factors," an area of influence which appears to have greater importance in determining the occupational behavior of women than of men. Item 8 reflects the pattern of the married woman's teaching role as a secondary occupation, with house-wife being the primary one--in short, the MRS. still has greater attraction than the BS.

#### Responses of Turnover Teachers Remaining in Idaho

The data from Table A-21 in Appendix C show that 415 teachers who resigned their 1966-67 Idaho teaching positions remained during 1967-68 in Idaho, and appeared to have been most influenced to leave their positions by the following factors:

- 1. Future outlook for improvement in working conditions too discouraging.\*
- 2. Other states paid higher salaries.
- 3. Lack of opportunity for advancement.\*
- 4. Inadequate community financial support of schools.\*
- 5. Lack of time for planning, preparing, and evaluating pupil educational activities.\*
- 6. Desire for change (adventure).
- 7. Lack of teaching aids, materials, and equipment.\*
- 8. Too little relief from pupil contact during the day.\*
- 9. Salary schedule not related to merit.\*
- 10. Administrator failed to support teachers' decisions.

For turnover teachers remaining in Idaho, "Future outlook for improvement in working conditions too discouraging," was reported as the most influential factor in the respondents' decisions to leave their positions in both 1963 and 1965. The first nine factors listed by teachers remaining in Idaho also appeared on the lists of factors already reported as influencing males and females to resign their



positions. However, the order of importance assigned the factors varied between three respondent groups. We cannot explain item 2--"Other states paid higher salaries"--because all these respondents remained in Idaho!

#### Responses of Turnover Teachers Leaving Idaho

Four hundred twenty-five of the 835 turnover teachers responding to the questionnaire left Idaho. The following are the ten most important factors influencing their decisions to leave their 1966-67 positions and Idaho, as determined by the responses tabulated from Table A-20 in Appendix C.

1. Salary insufficient.\*

2. Other states paid higher salaries.\*

3. Future outlook for improvement in working conditions too discouraging.\*

4. Inadequate community financial support of schools.\*

5. Lack of opportunity for advancement.\*

6. Salary schedule not related to merit.\*

 Lack of time for planning, preparing, and evaluation of pupil educational activities.\*

8. Lack of teaching aids, materials, and equipment.\*

9. No financial future in teaching.

10. Desire for change (adventure).

"Salary insufficient," the primary factor influencing the resignations of male respondents was, in the case
of turnover teachers who left the state, of slightly
greater importance than "Other states paid higher salaries."
Of course, it would be expected that for those who left the
state for apparent economic reasons that higher salaries
would be of prime consideration. Eight of the first nine
items listed above are directly or indirectly related to
school finance. The respondents who left their Idaho positions were strongly influenced by economic factors.

#### General Comparison with the 1965 Idaho Study

Nearly every item listed on the top ten of each of the above four suh-groups appeared on each respective list of the 1963 and 1965 studies. However, there was a general shifting of positions within each group. Noticeable by its absence from the top ten was questionnaire item 3, "Failure of school patrons to respect and accept teachers like other professional people." That item was ranked among the top ten in three of the four groups in 1963. For the respondents in the 1965 study, it was ranked eleventh by all males; 16.5 by those remaining in Idaho; eighteenth for those leaving Idaho; and twenty-ninth by all females. Although we do

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not have data to support any conclusions, we could speculate that during 1966-67 Idaho teachers participating in this survey perceived themselves as having rather high status in their respective communities. Perhaps there is some relationship between a degree of militancy and increased salaries with occupational status. This facet could be a topic for further research.

#### Critical Index for Teacher Turnover

To clarify the relative strength of influence exerted by each of the six major areas of possible dissatisfaction sampled by the questionnaire, a "cluster of response" technique was employed. The procedure is described in detail in Chapter I of this study. The "critical index" obtained for each major area as a result of the "clustering" procedure is presented in Table 6-5. The greater the number, or "critical index," of the major areas, the greater the apparent influence affecting teachers' decisions to leave their 1966-67 positions in Idaho schools.

It can be seen from the data listed in Table 6-1 that for males and for all respondents leaving Idaho the greatest "critical index" occurred in the major area, "Economic Factors." This same relationship was also reported in the 1963 and 1965 Idaho teacher turnover studies. The "critical index" in this area varied from a low of 0.73 for female respondents to a high of 1.25 for respondents leaving Idaho. Male respondents and those leaving Idaho were most influenced by economic factors. Female respondents and those remaining in Idaho were much less strongly influenced by this major area. Economic factors appeared to be the most important influences upon teachers when they made their decisions to resign.

"Working Conditions" was the category that ranked first among those respondents remaining in the state. However, it had the second highest "critical index" for all male and female respondents and for those respondents leaving Idaho. Again, male respondents and all those respondents leaving Idaho were more strongly influenced to resign because of "Working Conditions" then either females or those respondents remaining in Idaho. It would appear that the broad area of working conditions is a chief factor in intrastate mobility.

The "critical index" for "Community Factors" ranked third in magnitude for respondents leaving Idaho; third for males; and sixth, or last place, by female respondents, and in fourth place for respondents remaining in Idaho.

"Pupil Factors" ranked fifth as a cause of dissatisfaction among male respondents; fourth among female respondents; and last (sixth) among respondents leaving Idaho.



TABLE 6-5

CRITICAL INDEX FOR IDAHO TEACHER TURNOVER 1966-67<sup>a</sup>

	Respondents			
Major Area	Male	Female	Remaining in Idaho	Leaving Idaho
Administrative and Supervisory Factors	0.66	0.48	0.56	0.59
Community Factors	0.77	0.43	0.57	0.64
Economic Factors	1.18	0.73	0.66	1.25
Personal and Family Factors	0.38	0.69	0.50	0.56
Pupil Factors	0.60	0.49	0.58	0.51
Working Conditions	0.87	0.70	0.74	0.82

Note: The hundredth places in the above table have very slight deviations due to the electronic computer's internal truncating and rounding of decimals.

The greater the number, or "critical index" of the major areas, the greater the apparent influence of those areas on teachers' decisions to leave their 1966-67 Idaho positions. The "critical index" was obtained as follows: the answers to questionnaire items 37 through 76 were weighted. A numerical value was arbitrarily assigned each possible response. An answer of "N," indicating that the factor had no influence on the respondent's decision to change positions was given a value of 0. An answer of "S," or slight influence, was given a value of 1; "M," or moderate influence, was given a value of 2; and "D," or decided influence, received a value of 3. The values that each question received were totaled. The total values for the questions within each major area (or cluster) were added together to give a "cluster" response to that major area. Each "cluster" total was then, in turn, divided by the total number of respondents to obtain the "critical index." The maximum possible "critical index" under this procedure is 3.0.

For example, Table A-18, page 208, shows the male responses to Part III of the questionnaire. The five items (questions 37-41) under "Administrative and Supervisory Factors" had a grand total of 1804 respondents checking the items--361, 363, 363, 360, and 357, respectively. The total weight of the cluster's five items was 1203--217, 298, 298, 171, and 219. By dividing 1203 (the total weight) by 1804 (the total N) the Male "Critical Index" for Administrative and Supervisory Factors (0.66) was calculated. This procedure was used to compute all "Critical Indexes."

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"Pupil Factors" ranked third among respondents remaining or moving within Idaho.

The "critical index" for the major category "Administrative and Supervisory Factors" was ranked in fifth place as an influence on the resignations of respondents who remained in Idaho and female respondents. For respondents remaining in Idaho and all males, "Administrative and Supervisory Factors" was rated in fourth place.

"Personal and Family Factors" ranked in sixth, or last, place as the least influential major area for male respondents and respondents leaving Idaho; and in third place for respondents remaining in Idaho. "Personal and Family Factors" ranked fourth in importance as a major area of influence for female respondents.

A comparison of the "critical index" derived from each major area by male and female respondents shows that males who resigned were more strongly influenced in all areas than were females, with the exception of "Personal and Family Factors." The "critical index" in this area was almost twice as great for female respondents as for male respondents.

The "critical indexes" for respondents remaining in Idaho and respondents leaving Idaho exhibit much the same type relationship, although to a lesser degree. Five of the major areas had greater influence on respondents who left the state than on those who remained, except for "Pupil Factors."

Since the "critical index" for Idaho teacher turnover uses a weighted mean, the indexes for the 1963, 1965, and 1967 studies can be compared. Tables 6-6 and 6-7 show the "critical indexes" for Idaho teachers who left their positions after the 1962-63 and 1964-65 school years, respectively. The reader will note the "Economic Factors" had a greater "critical index" reported in the 1963 study than either the 1965 or 1967 studies. This could be interpreted to mean that these factors were perceived by the respondents of the 1962-63 teacher turnover study as being more influential and as having had greater impact on the decisions to leave their 1962-63 teacher positions.

Again, in both previous studies as in the current study, the male respondents and those respondents who left Idaho had higher "critical indexes" than female respondents and those respondents remaining in Idaho, except for "Personal and Family Factors."



TABLE 6-6

CRITICAL INDEX FOR IDAHO TEACHER TURNOVER 1962-63a

Major Area	Respondents			
	Male	Female	Remaining in Idaho	Leaving Idaho
Administrative and Supervisory Factors	.54	.38	.46	. 47
Community Factors	.68	. 38	.45	.61
Economic Factors	1.27	.64	.63	1.26
Personal and Family Factors	.24	. 52	<b>. 3</b> 8	.38
Pupil Factors	.59	. 40	.46	.53
Working Conditions	.86	.58	.64	. 80

Source: Donald C. Orlich, Evelyn M. Craven, and R. D. Rounds, Teacher Turnover in Idaho Public Schools: 1963 (Pocatello: Idaho State University, July, 1964), p. 97. (Multilithed.)

The greater the number, or "critical index" of the major areas, the greater the apparent influence of those areas on teachers' decisions to leave their 1962-63 Idaho positions. The "critical index" was obtained by the same method described in the footnote under Table 6-5.

TABLE 6-7
CRITICAL INDEX FOR IDAHO TEACHER TURNOVER 1964-65<sup>a</sup>

Major Area	Respondents			
	Male	Female	Remaining in Idaho	Leaving Idaho
Administrative and Supervisory Factors	.64	.33	. 42	.52
Community Factors	.59	. 32	.36	.56
Economic Factors	.90	.43	.42	.92
Personal and Family Factors	.26	.50	. 40	.41
Pupil Factors	.60	.40	.46	.53
Working Conditions	.78	.51	.53	76

Source: Donald C. Orlich, David L. Crowder, and R. D. Rounds, Idaho Teacher Mobility: 1965 (Pocatello: Idaho State University, July, 1966), p. 88. (Multilithed.)

<sup>a</sup>The greater the number, or "critical index" of the major areas, the greater the apparent influence of those areas on teachers' decisions to leave their 1964-65 Idaho positions.

#### Statistical Analyses of Reasons for Leaving 1966-67 Positions

The rank-difference correlation (rho) was used to determine if there were any relationships between two major sub-group rankings on stated reasons for leaving positions as reported on question 36 and all of Part III of the questionnaire. The sub-groups consisted of: (1) males and females, and (2) those respondents remaining but moving within Idaho and those respondents leaving Idaho. The forty reasons that were given by the respondents for leaving 1966-67 positions, as determined from Part III of the questionnaire, were ranked by the investigators from first to last in each of the six major areas discussed above. The factor having the greatest weight was ranked number one, while those of lesser weight (influence) followed in numerical order. The following is a summary of the tabulations.

- 1. The ranking (of the ten given forced response items on question 36, reasons for leaving the 1966-67 positions) of all males compared to the same rankings of all females had a correlation (rho) of .93 which was significant at the .01 level. This means that the rank order of the responses between all male and all female respondents was similar, i.e., had some relationship not due to chance alone.
- 2. A correlation (rho) of .87 was found between the ranked reasons for leaving 1966-67 positions listed on question 36 for all respondents remaining or moving within Idaho and all respondents leaving the state. This correlation was high and was significant at the .01 level. This means that there was a very high degree of relationship between the ranked reasons as given by those leaving Idaho and those changing positions within Idaho. From this ranking it can be inferred that teachers who change their positions do so for similar reasons. However, those who leave the state of Idaho may have a greater degree of dissatisfaction with the various factors listed in this study than those who remained in Idaho, but change positions or school districts within the state. This seems to be substantiated from the "critical indexes" computed in Tables 6-5, 6-6, and 6-7.

The findings of the 1963, 1965, and this, the 1967 study, all tend to be very similar and almost identical in magnitude as to why teachers have either left Idaho or their respective Idaho teaching positions.

The six major areas included in Part III of the questionnaire were tested by rank order correlations (rho) to

Garrett op. cit., pp. 371-375. (Through the use of rho, a high correlation is found when items are listed in a similar order, or ranking. Conversely, a low correlation exists when items are listed in different orders for two groups.)

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determine if any significant differences would be found between two sub-groups consisting of (1) male and female and (2) intrastate moves and out-of-state moves. The following summarizes the findings by major area.

- 1. Administrative and Supervisory Factors. There were no significant differences in the rankings of five items included under this major area. There was a .70 correlation between rankings of those leaving Idaho and those remaining; and a .30 correlation between the rank orders of male and female respondents. This means that the groups had dissimilar rankings and that the factor described had a different impact on each sub-group.
- 2. Community Factors. There were highly significant correlations, .98 and .95, between those leaving Idaho and those staying; and between males and females on the eight tested community factors. These correlations were significant at the .01 level. This means the rankings were very similar or alike for both groups.
- 3. Economic Factors. There was a .70 correlation (not significant) for those leaving Idaho and those remaining in Idaho for the five items concerning the economic factors, especially salaries. As was noted in the critical indexes, out-of-state persons perceive salary or economic factors as apparently being more important than do those teachers who remain in Idaho. However, there were correlations of 1.00 (significant at .01) in these same rankings by all males and all females. This means that the male and female respondents ranked the five items in precisely the same order.
- 4. Personal and Family Factors. An identical but statistically significant correlation of .38 was computed for the "Personal and Family Factors" between both subgroups: males and females, and in-state and out-of-state respondents. This means that there was little relationship in the manner in which these groups ranked the eight items under the general area. Again, this would be expected by studying the critical indexes for each group.
- 5. Pupil Factors. A 1.00 correlation (significant at .01) was found in the rankings of "Pupil Factors" between both sub-groups. Males and females, and those leaving Idaho and those staying in Idaho ranked the "Pupil Factors" in identical order.
- 6. Working Conditions. The ranking of the ten items listed under "Working Conditions" were both significant at the .01 level for both sub-groups. The correlation between rankings of those leaving Idaho and those remaining in Idaho was .94. The rankings of the ten items for all males and all females had a correlation of .78. This means

that there were few differences in the rankings which concerned working conditions.

Rankings of the Critical Index for 1966-67. Table 6-8 lists the degree of relationship (rho) between the four sub-groups listed on Table 6-5. The only group with a statistically significant correlation (.01 level) was that computed between males and those respondents leaving Idaho. The rho was 0.94. This substantiates, statistically, that males and persons leaving Idaho do tend to perceive their situations in a similar manner.

TABLE 6-8

RANK ORDER CORRELATION (RHO) BASED ON RANKINGS OF THE "CRITICAL INDEX" BY SUB-GROUPS FOR 1966-67\*

Sub-group	Rho	Degree of Significance
Males vs. females	.43	Not Significant
Respondents who left Idaho vs. respondents remaining in Idaho	.60	Not Significant
Females vs. respondents who left Idaho	.49	Not Significant
Males vs. respondents who left Idaho	.94	.01 level
Males vs. respondents remain- ing in Idaho	.77	Not Significant
Females vs. respondents remaining in Idaho	.54	Not Significant

\*The major factors or areas are: Administrative and Supervisory, Community, Economic, Personal and Family, Pupil and Working Conditions (see Part III of the questionnaire).

Data are taken from Table 6-5.

All other rankings of the critical indexes tested to be not significant, i.e., (1) males vs. females, (2) out-of-state vs. in-state respondents, (3) out-of-state vs. all female respondents, and (5) in-state respondents vs. all females. This means the rank orders of critical indexes for each pair were not similar. These data tend to substantiate the hypothesis that males and females move for different reasons, as do those moving within the state and those leaving the state.

#### CHAPTER 7

## CONCLUSIONS AND IMPLICATIONS

#### I. GENERAL

Teachers leave their positions for a variety of reasons as evidenced by the data presented in this study. Yet, there appears to be one overriding generalization—male and female teachers leave their teaching positions for different reasons. This and other aspects will now be discussed.

## Economic Factors

Idaho teachers who resigned from their 1966-67 positions, as a group, were most influenced to leave those positions by economic factors. From the findings reported in Chapter VI, it appeared that salary increases averaging between \$500 and \$1500 per year were available to qualified teachers who were willing to move. Increased salaries throughout the state of Idaho, though not eliminating turnover entirely, would do much to lessen the magnitude of the problem, and would help to attract and retain teachers. The recruitment of academically qualified teachers to fill vacancies is most difficult since Idaho must compete with surrounding states, all of which pay higher teacher salaries.

As we reviewed the respondents' reported salary data, and other trends which indicated that economic factors prompted males and those respondents leaving the state to change positions, it became apparent that the Idaho classroom teacher salary structure is not competitive. The reader is invited to re-examine the data in Chapter 6 to observe the rather high degree of importance given to economic factors by teachers leaving their 1966-67 Idaho teaching positions.

Idaho became somewhat competitive in the teacher "market place" during the close of the 1964-65 school year, and apparently maintained that posture during the 1965-66 school year. This was caused partially by an average salary increase of \$501.00 for the 1965-66 school year (the largest yearly salary increase since 1953). During the 1966-67 school year, the average raises were \$126 for the year-inversely relating to the relatively large number of teachers who resigned their positions.

Section 33-1219 of the <u>Idaho Code</u> establishes the State's mandatory and minimum salary schedule. In Idaho, -138-



the minimum allowable salary for a teacher with four years of accredited college training (BA equivalent) is \$2370. Table 5-5 presents the state of Idaho's legislated salary minimums.

Table 7-1 adds more evidence to our conclusion that Idaho must exert even greater financial effort to compete for qualified teachers. The data on Table 7-1 reflect the average 1967 salaries of classroom teachers and the percentage of classroom teachers in various salary categories for the Rocky Mountain and West Coast states.

It can be observed that Idaho has the greatest number of classroom teachers in salary category below \$5499 than any other listed state. What this means is that Idaho must draw from the western states for new or replacement teachers. The chances of attracting career oriented teachers to Idaho are reduced when the economic aspects are considered. Kearns' study of the egress of University of Idaho male graduates showed that those males who remained in Idaho obtained satisfactory employment, liked Idaho, were natives of Idaho, and enjoyed Idaho's recreational opportunities. These reasons accounted for 85 percent of the primary responses. In short, the males who remained in the state enjoyed Idaho's natural resources. The reader must remember that every state listed on Table 7-1 is equally endowed in natural resources, except, perhaps, Nevada and portions of Arizona and New Mexico. say that Idaho's natural beauty will outweigh economic factors in attracting teachers may not be supported by empirical evidence.

The states which supplied the majority of immigrants to Idaho who ultimately moved either intra- or interstate in 1967 were the ten western states. We would predict that these same ten states are supplying the bulk of additional personnel to Idaho's teaching corps, since Idaho institutions are unable to fulfill the demand.

If Idaho is to compete for <u>quality</u> personnel, then the Idaho Task Force Committee for Education's recommendation that Idaho classroom teaching salaries be competitive with the Rocky Mountain states is imperative. We recognize Idaho's overall apparent fiscal inability to compete with the West Coast states. Yet, it must be realized that Washington and Oregon are those states that have consistently attracted Idaho's academically qualified teachers since at least 1959 when data were systematically collected about Idaho teacher turnover.



William Alan Kerns, "Factors Relating to the Egress of University of Idaho Male Graduates from the State of Idaho" (unpublished Master's thesis, University of Idaho, Moscow, 1968), p. 54, Table 14.

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TABLE 7-1

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ESTIMATED AVERAGE SALARY FOR SELECTED PUBLIC ELEMENTARY AND SECONDARY SCHOOL CLASSROOM TEACHERS' STATES: 1967

	AVER	AVERAGE SALAR		PERC	IQ LN	PERCENT DISTRIBUTION	1	OF TEACHERS	ERS
	(In	dollars)			BY	SALARY	GROUPS*	*S	
STATES	1.14	Elemen-	Sec-	Under	\$3500	\$4500	\$5500	\$6500	\$7500
	Teachers	tary School	ondary School	\$3500	to \$4499	\$5499	\$6499	\$7499	Over
UNITED STATES (AVERAGE)	6821	6099	7095	0.3	5.3	19.2	27.7	21.3	26.1
ROCKY MOUNTAIN STATES				-					
Artzora	7230	7065	49	1		0	•	•	•
	6625	6500	70	-	1	φ.	•	•	س
	5875	5500	17	0.1	•	•	•	•	•
Montana	0009	5725	55	1	<b>&amp;</b>		•	•	•
	7 390	7274	56	!	!	4	•	•	•
New Mexico	6630	6650	6625	i		20.0	31.0	0.04	0.6
11 to 1	0649	(NA)	NA	1 1	ı		•	•	•
Wyoming	6429	0049	20	0.5	1.0	1.	•	25.0	•
WEST COAST STATES									1
California	8450	8075	02	-	1 1	10.5	21.5	22.5	45.5
	2000	6829	ന	1 1	0.1	ა	ო	•	
Washington	7 330	7095	9	;	9 9 8	2.	25.0	25.0	ω (2)
Source: Statistical	tical Abstract	ract of th	ne U. ted	States	s, 196	7, U.S	. Depa	Department	of

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average totals to 99.9%. Commerce (Washington, D.C.: USGPO), p. 129, Table 181. \*All States total to 100.0% the U.S. average to NA=Not Available.

What is a reasonable and competitive minimum and maximum range of teaching salaries? To answer the question depends on one's orientation. If major competition for beginning teachers with the Rocky Mountain area is desired, then a minimum salary of \$6,000 must be considered. Nevertheless, a minimum salary for 1969-70 must be at least \$5600 just to maintain minor competition for Idaho's own graduating seniors.

A high salary minimum will attract younger and probably more career oriented male teachers. Since males consider the economic facets of teaching when they leave their positions it is logical to assume that they would remain in Idaho if economic conditions were improved. This would necessitate a rather high minimum plus a marked addition to state's maximum salaries. A maximum salary of \$9000 to \$10,000 (to be reached in eight to ten years) would help counteract the West Coast attractiveness for Idaho male teachers. Male teacher turnover would not be eliminated, but it could be reduced with stronger economic efforts.

Since females have consistently left their teaching positions for personal and family reasons, the salary structure appears to be of less concern. Non-career oriented females who re-enter teaching in their forties and fifties are, in a sense, "captive" and will re-enter teaching regardless of salary. Thus, salary arguments may continue to rage in Idaho. But, who stays and who leaves may affect the quality of the educational product.

Figure 8 and Table 4-3 show and list the ages of the 1967-68 Idaho teacher corps. It was encouraging to note for the first time since at least 1955, that there is a substantial proportion of young females between the ages of 21 to 25 teaching in Idaho. However, it must be recognized that the majority of Idaho teachers are older females with almost 1384 or 26 percent of all females approaching retirement by 1975!

The alternative to increased salaries to keep better prepared teachers in the state is educational disaster. There are unpublished data available to show that an erosion has taken place on the raw score means of Idaho's high school juniors on the Iowa Test of Educational Development (ITED) within several high schools in Idaho. What has caused the slight declines has not been studied. Surely excessive high school teacher turnover is playing a major part. Curriculum cannot be improved with a consistently large number of new teachers in the classroom year after year.

Files of the Idaho State Department of Education, Boise.

## Working Conditions

Working conditions, next to economic factors, were most influential in causing Idaho teachers to leave or change their 1966-67 positions. Of course, any substantial improvement in this area is dependent on the fiscal status of the respective school districts. Smaller class loads, sufficient teaching materials, supplies and equipment, and adequate physical plant are all educational advantages which need financial considerations.

These findings should come as no surprise for they were also reported in a special study on Idaho statewide educational conditions and finance published by the National Education Association in January, 1965. In part, this report stated:

The impressions that the six survey teams brought back to the full Committee's evaluation sessions were found to have a high degree of correlation. Although marked disparities in educational levels were noted both among school districts throughout the state and within single districts, no one region of the state appears to have a monopoly on educational advantages or disadvantages. The variations in program, facilities, and staff appear to be comparable in all regions, with this predictable exception: It was noted that diversification of our curricula and facilities and staff specialization increase in proportion to the size of pupil enrollments. The small rural school systems appear to be far behind urban schools in these However, even the more heavily populated school districts, with several large, modern schools, invariably contain antiquated, run-down buildings where teachers struggle to maintain student interest in overcrowded poorly ventilated and lighted classrooms, where instructional tools and facilities are grossly inadequate, library materials meager and outdated, and supporting services in most cases nonexistent.

The process of education cannot thrive in such an environment and yet survey teams found circumstances similar to those described above in many schools, in both urban and rural districts, throughout the state.1

Since teaching conditions vary between districts in the state, it behooves local school boards and school administrators to survey their local conditions in an attempt to alleviate problems of vital concern.

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<sup>1</sup> Idaho: A State-Wide Study of Educational Conditions and School Finance, Report of a Public School Study, National Commission on Professional Rights and Responsibilities, NEA (Washington, D.C.: NEA, January, 1965), p. 24.

Many routine and monotonous duties which distract from the teachers' professional or instructional duties could be easily handled by non-professional assistants. The latter could supervise lunch lines, corridors, lavatories, and a host of "chaperoning" activities associated with general management. Some Idaho school districts have inaugurated "teacher aide" programs under Title I of the Elementary and Secondary School Act of 1965. These projects merit consideration as one means to improve overall working conditions. However, greater emphasis is then needed to re-orient the classroom teacher to a role that accomodates the addition of such ancillary personnel.

## Other Factors Relating to Teacher Mobility

- 1. Dissatisfaction from pupil related factors which influenced teachers to resign their 1966-67 positions appeared to play a minor role with all groups responding to our study. The one item that was found in the top ten reasons for leaving 1966-67 positions for females and those moving in Idaho was "Too little relief from pupil contact during the day." Other pupil factors listed on the questionnaire caused little concern to the great majority of respondents. Each school district would have to study its own conditions to help solve the problem of allowing some released time for teachers.
- 2. Community related problems seemed to have had some influence on male respondents and those who left the state. In 1963, respondents expressed concern regarding community conditions, and seemed to resent their perceived status in their respective communities. In the 1965 study, there appeared to be fewer respondents affected by negative community factors. From our limited and somewhat erratic data, we cannot adequately analyze the perceptions that Idaho turnover teachers have of their community related problems.
- 3. An important factor that was evident in our findings was the movement of individuals from smaller towns to larger ones, from smaller school districts to larger ones, and from smaller sized schools to larger ones. This finding was obvious in the 1965 Idaho teacher turnover study, but not so in 1963. What this may mean is that the smaller sized school district may be placed in a position that it must face the alternative of hiring "captive" local teachers, or be perennially faced with substantially large yearly faculty turnover rates.

The findings reported in this study are substantiated by the findings of the Director of Secondary Education of the Idaho State Department of Education. In the Accreditation Reports of Idaho Secondary Schools for several school years from 1962-63 through 1966-67 smaller high schools
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(enrollment 299 or less) were above the state medians for all public high schools for percent of faculty turnover. Table 7-2 summarizes the findings of the Idaho Director of Secondary Education. Table 7-3 shows the details of teacher turnover in Idaho public high schools for 1966-67.

Table 7-2 presents data concerning the turnover of Idaho's high school teachers between the 1962-63 and 1967-68 school years. There is a strong inverse relationship between high school size and faculty turnover, i.e., the smaller the school, the greater the turnover. Over the six year period the larger high schools (1000 and over) consistently lost a lesser percentage of their faculty than did the smaller ones. The very small sized high schools (299 and fewer) have consistently had turnover rates that almost double those of the group of high schools with enrollments 300 and above. Those high schools with enrollment over 1000 had the smallest percentage of teacher turnover during the six year period. The implications may be such that further consolidation of attendance units and school districts should warrant serious legislative consideration. There are "isolated" high schools, but these appear not to be the rule in Idaho. It seems that with few exceptions further district and school plant consolidation could be affected. observations were noted by the 1965 NEA Idaho study wherein the study team wrote:

Examples are observed where further consolidation of school attendance units appears to be essential to improvement of programs and services. In other cases some special programs or special staff could be shared by two or more districts. Some examples are found where as many as three districts are within reasonable commuting distance for transporting pupils to one center for such classes as programs for physically and mentally handicapped children, vocational courses, and advanced science programs. Some specialized personnel, too, could be shared in these instances.

If local school districts are to improve their programs of studies, then basic local units must be organized to make maximum utilization of available financial resources and educational talent. Again, citing the NEA's 1965 survey: "The observations in this study leave no doubt about the wide range among school districts in their programs of instruction and professional services." These comments reflect a current status of Idaho educational conditions and have an effect on teacher mobility. They must be considered as being relevant to a study on teacher turnover.

Dr. Thomas O. Bell, Assistant Dean of the College of Education at the University of Idaho, is preparing a study



<sup>1&</sup>lt;u>Ibid.</u>, p. 54. 2<u>Ibid</u>.

TABLE 7-2

PERCENT OF TEACHER TURNOVER IN IDAHO PUBLIC HIGH SCHOOLS 1962-63 THROUGH 1967-68

W. sh. Cohool	Percent	of Teac	cher Turt	nover Per	c School	Yeara
High School Enrollment			1964-65			
Over 1500	21.5	17.5	18.6	17.7	12.7	15.4
1000-1500	21.2	14.5	17.5	17.6	18.3	19.6
500- 999	19.8	22.7	25.8	22.1	25.5	19.0
300- 499	20.3	24.2	21.6	21.2	22.1	17.8
200- 299	29.4	28.2	24.6	24.6	23.8	18.2
100- 199	28.1	31.5	27.5	24.0	24.8	17.8
50- 99	34.1	35.2	38.3	29.8	25.9	22.0
Under 50	25.0	37.5	25.0	52.3	27.8	26.9

Source: Robert E. Neal, Statistical Summary on Individual Secondary Schools for the School Year 1967-68 (and each respective school year for all other data) (Boise: Idaho State Department of Education, 1967), pp. 1-11.

<sup>a</sup>Percents rounded to nearest tenth by investigators, utilizing the average weighted turnover figure for each respective school size.

PERCENT OF TEACHER TURNOVER IN IDAHO PUBLIC HIGH SCHOOLS 1966-67

High School Enrollment	No. of Schools	Full-Time Teacher Equivalents	Percent of Teacher Turnover
Over 1500	8	503.78	12.75
1000-1500	8	396.99	18.72
500-1300	12	315.68	25.5
300 - 499	22	426.81	22.07
200 - 299	19	266.38	23.79
100 - 199	30	299.12	24.85
50- 99	20	144.14	25.96
Under 50	7	31.63	27.77
Approximate School Teach	median fo ner Turnov	r Public High er by School Size*	24.0%

Source: Robert E. Neal, Statistical Summary on Individual Secondary Schools for School Year 1966-67 (Boise: Idaho State Department of Education, 1966), pp. I-VI.

\*Determined by investigators.

in Idaho school district reorganization which will be published in the winter of 1968-69. His study will present details and recommendations for reorganization of Idaho's 117 school districts.

## Differences Between Male and Female Responses

It is obvious that there are differences between males and females -- or as the French are credited for saying, "Vi Vala Difference." But, on the more serious side, the total response patterns between males who left their 1966-67 teaching positions were different, statistically so in several cases, from female respondents. It appears that the male perceives teaching as his primary occupation, with economically related factors being of great importance to his career opportunities. This is not to be construed that women are not interested in salary factors. Women tended to change positions for personal reasons such as: spouse's move, family moved, and actual or pending marriage or need to take care of home. Of course, economic factors were considered by females, but not to the extent that they were for the males. (Examine Table 6-1 to observe the relative weight of responses between males and females.)

In response to question number 36 which asked for the one most important factor that influenced the changing of the position held in 1966-67, women checked "Personal reasons" as being the number one choice, followed by "Husband changed employment." Analysis of Part III of the questionnaire showed that 76, or 17 percent, of all female respondents left their positions because of "maternity"; while 140, or 31 percent, of all females changed positions because of spouse's mobility. It appears that almost one-half of the females responding to this study changed positions or left teaching not because of occupational grievances, but family reasons.

Lest the female teachers of Idaho rise in anger, the above discussion and interpretation is not applicable to all female teachers. To be sure, there are many career oriented females teaching in Idaho. These teachers are in an occupational category different from the sometime-teacher sometime-housewife position that appears to account for a very large incidence of Idaho's teacher mobility, and teacher loss.

Regarding the total mobility patterns of males and females, there also appeared to be some general noticeable differences. Fifty-four percent of all females responding to this study stayed in Idaho. That is, 248 of 438 responding females were in the state for the 1967-68 school year. Forty-two percent of the responding males--167 of 397--stated that they remained in Idaho during the 1967-68 -146

school yea.. The out-of-state migration pattern was, in proportion, predominately males. Item 32 listed in Appendix C, Table A-9, reflects these findings. This out-migration ratio is somewhat important, since Idaho's class-room teaching corps for 1967-68 was comprised of women, in a five to three ratio over men.

Once again, we raise the point that was raised in the 1965 Idaho teacher study: If teaching is to be classified as a "profession" what impact will a large non-career segment have on the long-range goals of the entire professional group? Obviously, this is beyond the scope of our study, but the ramifications need to be analyzed.

#### II. AN INFORMATION SYSTEM MODEL

One of the major purposes of this investigation was to develop and field test an information system on teacher mobility that could be utilized in any state or school district. To this end, the questionnaire is located in Appendix A and proved to be highly successful in administration, tabulation, and analyses. Appendix B presents a critique of the questionnaire with suggested improvements for future users. Appendices C and D present the computer programs, flow charts, write-ups and data output for IBM Computer Models 1130 and 1620, respectively. These programs can be adapted to any state wishing to utilize the survey instrument.

The research model suggested here has been tested in 1963, 1965, and 1967 in Idaho. The results of the three surveys have proven to be extremely reliable and valid. There has been a very high consistency of responses over the six year period. Further, the state of Kentucky used our instrument and analytic methods in determining that state's teacher mobility. The instrument is apparently easily adapted to specific states.

It would be our recommendation that a user of the system utilize the IBM Model 1130 computer to reduce overall running time. Several card sorts must be accomplished on the IBM Model 1620 computer which require costly machine time. Too, the Model 1620 is a much slower computer and takes more time to process the data causing the costs to increase proportionally.

Analyses of written comments showed that basically those respondents who added information restated reasons



<sup>&</sup>lt;sup>1</sup>S. Kern Alexander, George Rush, and Mary Figg, <u>Teacher Turnover Study</u>, 1966 (Kentucky: Division of Statistical Services, Bureau of Administration and Finance, Kentucky Department of Education, 1966). (Multilithed.)

that were already listed on the instrument. Most of the respondents who added comments expressed a great degree of dissatisfaction with general factors, e.g., the state's governor, tax groups, specific administrators, "right wing" groups, and the like. To this end, one might determine the intensity of apparent dismay as to why specific persons left their former positions. Several respondents gave their exact salaries to show the differences, e.g., "I made \$6,400 in Idaho during 1966-67 year. For 1968-69 I'll be making \$10,500!" That was the response of a male classroom teacher who left the state.

In short, we have tested an information system that has local, state, regional or national applicability. Perhaps a group of state departments of education or regional educational laboratories might collaborate in conducting such studies; especially if preliminary study would reveal some common problems and in or out-migration patterns.

## III. IMPLICATIONS

We have attempted to present data, information, and interpretations concerning a problem that undoubtedly has had adverse affect on one state's educational programs. We have not been able to ascertain what effects excessive teacher turnover has had on individual schools. Certainly, long-range plans or programs cannot be effectively carried out if there is a chronic pattern of teacher mobility. This becomes rather crucial at the secondary school level where curriculum reforms are being instituted throughout the nation and state. Rapid curriculum changes are observable on the elementary school level also--modern mathematics and science--to cite but two programs. Curriculum offerings which require specialized or advanced education can only be jeopardized by faculty mobility.

It would be appropriate if local school boards and administrators would study their own district teacher mobility patterns. If local problems are to be solved, the first step would be to isolate apparent reasons for teacher dissatisfaction within the local situation.

The comments made by one of Idaho's leading superintendents is most appropriate as the impression of one superintendent who is desirous of maintaining an excellent program of studies. Rulon Ellis, superintendent of schools in Pocatello, Idaho, stated that at the end of the 1967-68 school year the district had a teacher turnover of 26 percent! He was then quoted as saying:

For stability this rate should never be higher than 14 to 15 percent in this district. Twenty-three percent of our staff are in their first or second year of -148-



teaching. In my opinion the sanction imposed by the Idaho Education Association cut the number of applications from prospective teachers by one-third. We have not been able to be as selective in our teacher hiring as we would like to be. We must become more competitive in our salary schedule before we can stop this high rate of turnover.

Our study has raised several questions for immediate concern. Perhaps the reader has asked himself, "Why?" The answer is relatively simple: "Ultimately better teacher morale, education, and services really mean better classroom teaching." This is the one major reason for continued interest in who leaves, and who stays to teach in public elementary and secondary school classrooms.

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ldaho State Journal (Pocatello), Tuesday, September 10, 1968, Section B, p. 3.

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# 1967 TEACHER MOBILITY STUDY QUESTIONNAIRE Idaho State University

Please complete the questionnaire by checking the appropriate items and filling in the requested information. Return the completed questionnaire to: DR. TOM EDGAR, Director, Teacher Mobility Study, College of Education, Idaho State University, Pocatello, Idaho 83201.

This is an academic study. All personal information will be held in strict confidence. The study will be made without any mention of names or school districts.

## PART I

## Personal Data

1. I am:(1) Male(2) Female  2. I am:(1) Single(2) Married(3) Divorced(4) Separated(5) Widowed	8. As of May, 1967, how many years did you leach in Idaho?(1) less than 1 year(2) 1 year(3) 2-3 years(4) 4-5 years(5) 6-9 years(6) 10-14 years(7) 15 years or over
3. I have the following number of dependents, i.e., spouse and children:(1) None(2) 1-2(3) 3-4(4) 5-6(5) 7 or more	9. The institution granting my highest degree (or if non-degreed, institution providing education courses which lead to Idaho teaching certificate) was: (1) Boise College(2) Brigham Young University(3) College of Idaho(4) Idaho State University
4. I have the following number of dependents under 18 years of age:(1) None(2) 1-2(3) 3-4(4) 5-6(5) 7 or more	(5) N. W. Nazarene College(6) University of Idaho(7) University of Utah(8) Utah State University(9) Other (Please specify name of institution and state)
5. My age is:(1) 24 or younger(2) 25-29(3) 30-34(4) 35-39(5) 40-44(6) 45-49(7) 50-54(8) 55-59(9) 60 or over	10, 11, 12. Please list your academic subject major: (a minimum of 30 semester hours or 45 quarter credit hours.)  13, 14, 15. Please list your academic subject minor: (a minimum of 20 semester hours or 30 quarter credit hours.)
6. The highest degree I hold is:(1) No degree(2) BA or BS in Education(3) BA or BS not in Education(4) Masters in Education(5) Masters not in Education(6) Education Specialist(7) Doctorate(8) Other	<ul> <li>16. Are you still living at the same address as you did in 1966-67?(1) Yes(2) No</li> <li>17. During 1966-67, I was employed under the following type of Idaho Teaching Certificate (check one only):(1) Provisional Elementary</li> </ul>
7. I have taught a total cf:(1) Less than 1 school year(2) 1 year(3) 2-3 years(4) 4-5 years(5) 6-9 years(6) 10-14 years(7) 15 years or over	(2) Provisional Secondary(3) Standard Elementary(4) Standard Secondary(5) Elementary Principal(6) Secondary Principal(7) Pupil Personnel Service(8) Other (please specify)



## PART II Your 1966-67 and 1967-68 Positions

Part II of the questionnaire concerns your status for the school years of 1966-67 and 1967-68. The column to the left concerns your Idaho position for the 1966-67 school year, while the righthand column pertains to your 1967-68 position. As you read each question, please make a check mark in the appropriate space for 8OTH your former position, held in 1966-67, AND your present position—the 1967-68 school year. Even though you may no longer be teaching, please answer all questions which are applicable to you. (You will note that for your ease in marking, the columns are adjacent).

My Former Position 1966-67	My Present Position 1967-68		My Former Position 1966-67	My Present Position 1967-68	
18.	19.	Population of my Community of	26.	27.	My Primary duty:
	-	Residence:	(1)	(1)	Teacher
(1)	(1)	Less than 500	(2)	(2)	Principal
(2)	(2)	500-2499	(3)	(3)	Superintendent
(3)		2500-4999	(4)		Guidance
(4)	(4)	5000-9999	(5)		Librarian
(5)		10,000-19,999	(6)	1	Special Education
(6)	(5)	20,000-49,999	(7)		Supervision
(7)		50,000-100,000 Over 100,000	(8)	1	Not Applicable
(8)	(0)	Over 100,000	(9)		Other (please specify)
	0.1	Total Enrollment in School Dis-	(7)	(7)	Onici (pieces specie),
20.	21.	trict in which I live:			
(1)	(1)	Less than 50	28.	29.	At least half my time is spent
(2)	(2)				teaching in:
(3)		100-299	40.5	<b>!</b> ,,,	At. Atrior Area of Academic
(4)		300-599	(1)	(1)	My Major Area of Academic Preparation
(5)		600-1199	(2)	(2)	My Minor Area of Academic
(6)		1200-5999 6000-11,999	(2)	(2)	Preparation
(7) (8)		12,000-19,999	(3)	(3)	My Major and Minor Areas of
(9)		20,000 or more		, ,	Academic Preparation
(//			(4)	(4)	An Area Outside My Major and Minor.
22.	23.	Total Enrollment in the School in	(5)	(5)	An Administrative Post
	R	which I teach:	(6)	(6)	Pupil Personnel Services
(1)	(1)	Less than 50	(7)	(7)	Not Applicable
(2)	(2)				• •
(3)		100-299	1	21	Annual Salary from Prime
(4)	H	300-499	30.	31.	Occupation:
(5)		) 500-999 ) 1,000 or more		l	•
(6) (7)		Not Applicable	(1)	(1)	Not Working This Year
/-/	······································	1401 Applicable	(2)	(2)	Under \$5,500
0.4	1	The of Calcal in a Link & Appala	(3)	(3)	5500-5999
24.	25.	Type of School in which I teach:	(4)	(4)	6000-6499
(1)		Elementary (K-6)	(5)	(5)	6500-6999
(2)	4	Middle (7-9)	(6)	11	7000-7499
(3)	u	Senior High (10-12)	(7)	II	7500-7999
(4)		Junior College	(8)	III .	8000-8499
(5)		College or University	(9)	13	8500 or over
(6)	ж(О)	Not Applicable	· ······(7)	п (У	,



## PART II

## Your 1966-67 and 1967-68 Positions

## (Continued)

<b>32</b> .	State or Country in which you are now reaching	35.	Please check the one field that are of the
	or residing is:		your teaching experiences in Idaho as of the
			1966-67 school year.
	(1) Idaho	1	(1) My first teaching position.
	(2) Arizona		·
	(3) California	ŀ	(2) I had taught in Idaho previously to 1966-67, but in another district.
	(4) Colorado	ļ	(3) I have taught previous to 1966-67 in
	(5) Montana		Idaho but not for a continued length of
	(6) Nevada	1	time.
	(7) Oregon	Ĭ	(4) I taught in Idaho only long enough to
	(8) Utah		certify for some other state, then moved.
	(9) Washington		(5) I had taught previously to 1966-67, but
	Other: (please specify)	Ì	only in one other state.
			(6) I have taught intermittently in at least two or more states other than Idaho.
			(7) Other (please specify)
33.	If you moved into Idaho, from which state did	İ	
<b>JJ</b> .	you migrate:		
	, oog. 1		
	(1) Arizona		
	(2) California		
	(3) Colorado	36.	What was the ONE most important factor that
	(4) Montana		influenced your decision to leave your 1966-67
	(5) Nevada		position?
	(6) Oregon		(1) Administrative and/or supervisory
	(7) Utah		
	(8) Washington		(2) Adverse community conditions
	(9) Wyoming		(3) Critical difference of opinion with administrator
	Other: (please specify)		
			(4) Economic necessity
		ļ	(5) Husband (or wife) changed employment
			(6) Did not enjoy teaching
34.	During 1967-68, are you employed full-time in public elementary or secondary education?		(7) Personal reasons (returned to college married, divorced, health, etc.)
	position of accordary odecanon.		(8) Unsatisfactory teaching conditions
	(1) Yes		(inadequate facilities, pupil-teacher ratio
	(2) No		too high, etc.)
			(9) Teaching certificate was not renewed
	IF NOT, KINDLY STATE YOUR PRESENT AND		Other: (please specify)
	PRIMARY OCCUPATION		



#### PART III

## Reasons for Leaving Your 1966-67 Position

(Please Complete Regardless of Present Position)

DIRECTIONS: As you read each statement ask yourself this question: To what extent did this factor influence my decision to leave the position. I held during the 1966-1967 school year? Rate the influence of each factor by encircling the letter which most clearly defines your position.

N-the factor had <u>no influence</u> on your decision to change positions
S-the factor had a <u>slight influence</u> on your decision to change positions
M-the factor had a <u>mederate influence</u> on your decision to change positions
D-the factor had a <u>decided influence</u> on your decision to change positions

		A. Administrative and Supervisory Factors	•	
	Administrator failed to appreciate and praise worthy teachers.	N S M D 39. Board of Education goals differed from those per ceived by teacher.		Other reasons (specify)
	Administrator failed to support teachers' decisions.	N S M D 40. New teachers were no given adequate help.	1	•••••
		N S M D 41. Supervision for the improvement of instruction failed to meet teacher needs.	1	
		B. Community Factors		
	Community too small	N S M D 45. Inadequate community fi nancial support of schools		Unreasonable restrictions on the personal, civil, social, or
	Failure of school patrons to respect and accept teachers like other professional peo-	N S M D 46. Living and housing conditions unsatisfactory.	-	religious lives of teachers.
	ple.	N S M D 47. Cultural facilities inade	N S M D	Other reasons (specify)
N S M D 44.	General lack of parental in- terest in school affairs.	quate.  N S M D 48. School board too provincia	l.	
		C. Economic Factors		
	Business or industry offered higher income and better op-	N S M D 52. Other states paid higher salaries.	r NSMD	Other reasons (specify)
N S M D 51	portunity for advancement.  No financial future in	N S M D 53. Salary insufficient.		
	teaching.	N S M D 54. Salary schedule not related to merit.	1	
		D. Personal and Family Factors		
N S M D 55.	Actual or pending marriage or need to take care of home.	NSMD 59. If married, did you spouse's move prompt you leaving the position yo	•	Teaching was not personally satisfying.
N S M D 56.	Desire for change (adven-	held in 1966-67?	NSMD	Other reasons (specify)
N S M D 57.	ture). Desire to work in other	N S M D 60. Left position to return to College.	•	•••••
N S M D 58.	occupation.  Family moved or plans to move.	N S M D 61. Maternity (females only)		
		E. Pupil Factors		
N S M D 63.	Lack of parental cooperation	N S M D 65. Too little relief from pup contact during the day.	i NSMD	Other reasons (specify)
N S M D 64.	Pupils lacked a desire to learn.	N S M D 66. Too many dult and slor pupits to teach	<b>~</b>	
		F. Werking Conditions		
	Classes too large.	N S M D 71. Lack of time for planning preparing, and evaluating	<b></b>	<ol> <li>Too many routine and mo notonous duties.</li> </ol>
N 3 M D 68.	Future outlook for improve- ment in working conditions too discouraging.	pupil educational activiti  N S M D 72. Other teachers perceive	. NSMD/	<ol> <li>Unsatisfactory building o campus.</li> </ol>
N S M D 69.	. Lack or opportunity for ad-	to be too provincial.	NSMD	Other reasons (specify) .
N S M D 70	vancement.  Lack of teaching aids, ma-	N S M D 73. I was required to tead subjects in which a had in		
	terials, and equipment.	adequate preparation.  N S M D 74. Teaching too confining, (	••	••••••



#### APPENDIX B

## CRITIQUE OF THE QUESTIONNAIRE September 1968

by Donald C. Orlich

The purpose of this section is to discuss selected strengths and apparent weaknesses of the survey instrument. Other investigators may find this analysis of value in adapting our information system to determine causes for teacher mobility.

- 1. The basic format of a forced-response questionnaire which is oriented toward coding on electronic data
  processing cards proved to be highly satisfactory. Each
  question or item number is equivalent to a card column. The
  responses are numerically coded from one to nine to correspond to data card rows one through nine, respectively. This
  accounts for the maximum of nine responses per item. Future
  investigators may desire to adapt the format by increasing
  the number of responses and thereby reducing the number of
  items so that all information can be punched on one data
  card per respondent.
- 2. Questions three and four would be adequate with four responses each as follows:

3.	I have the following number of i.e., spouse and children:  (1) None  (2) 1-2  (3) 3-4  (4) 5 or more	dependents
4.	I have the following number of under 18 years of age:  (1) None (2) 1-2 (3) 3-4 (4) 5 or more	dependents

3. Question five should be a two column item, e.g., to include columns five and six, thus giving a more detailed division of ages. Categories to be added should include: "under 20," "20-24," "60-64," and "65 or over." Note: We have tried to use categories that have been established by the Federal agencies, e.g., the U.S. Bureau of the Census.



- 4. Item six could read as follows:
  - 6. The highest degree that I hold is:

    (1) No degree
    - (2) Bachelor's
    - (3) Master's
      (4) Education Specialist (Ed.S.)
    - (5) Doctorate
    - (6) Other (specify)
- 5. Item seven should include some specific reference data to avoid confusion, e.g., "As of (date), I have taught a total of (years).
- 6. Item nine, "The institution granting my highest degree (or if nondegreed, institution providing education courses which lead to Idaho teaching certificate) was \_\_\_\_ "must be hand tabulated since it does not seem practical to code the nation's 2000 plus colleges and universities. If such a code were needed for future studies, the Education Testing Service (ETS) of Princeton and Berkeley might be contacted to utilize their code numbers. However, this would require using four columns and perhaps six, rather than the one column used in this study.
- 7. Questions twenty and twenty-one could be changed to ask for the number of teachers employed in the school district rather than enrollment. This question pair could read as follows:

My Former Position	My Present Position
(Date)	(Date)
20.	21. Total Faculty in School Dis-
,	trict in which I live:
(1)	(1) 25 or less
(2)	(2) 26-50
(3)	(3) 51-75
(4)	(4) 76-100
(5)	(5) 101-200
(6)	(6) 201-400
- $(7)$	(7) 401-600
(8)	(8) 601-800
<del>(9)</del>	(9) 801 or greater

8. The following items appeared to provide little essential information or were redundant and could easily be omitted in future instruments:

#### SECTION II

My Former Position 1966-67	My Present Position 1967-68
22.	23. Total enrollment in the school in which I teach:
<b>26</b> .	27. My primary duty:
28.	29. At least half my time is spent traching in:

35. Please check the one item that best describes your teaching experiences in Idaho as of the 1966-67 school year. . . .

#### SECTION III

- 44. General lack of parental interest in school affairs.
- 51. No financial future in teaching.
- 62. Teaching was not personally satisfying.
- 72. Other teachers perceived to be too provincial.
- 75. Too many routine and monotonous duties.
- 9. The salary divisions on questions thirty and thirty-one would not be adequate for future studies. It is recommended that at least six additional categories be included--all at the upper end of the salary scale. The following should be considered: \$8500-8999; \$9000-9499; \$9500-9999; \$10,000-10,499; \$10,500-10,999; and \$11,000 or over.

Further the exact divisions should parallel those used by the US Office of Education reports and the Research Division of the NEA. These changes give investigators greater capability for national, regional or statewide comparisons.

10. Question thirty-two, "State or country in which you are now teaching or residing is: \_\_\_\_\_ "and thirty-three, "If you moved into Idaho, from which state did you migrate: \_\_\_\_ "should be allotted two columns so that all fifty of the United States plus, e.g., Washington, D.C., might be given a two digit numerical code, e.g., "Ol" for Alabama to "51" for Wyoming. Number 52 could be allocated to all foreign countries or territories. This procedure would allow the electronic computer to tabulate the responses, rather than the hand \*abulations which were necessary for all states not listed in the given nine responses.

Further, question thirty-three did not determine precisely if the respondents were natives of Idaho (or whatever -166-

state is desired). It is recommended that the first response to question thirty-three be:

"\_\_\_(-) I am a native of the state, the question does not apply."

The "-" is a negative or "skip x" sign and would expedite key punch operations.

- 11. Question fifty-four, "Salary schedule not related to merit," appears to have had ambiguous connotations. To clarify, the statement could be changed to: "Salary schedule does not include a merit pay provision," or "Salary schedule does not allow for individual merit pay."
- negatively oriented. A list of negatively written statements could be infinitely long; however, we attempted to isolate those potentially negative aspects of positions that apparently cause teachers to move. In future studies these items could be re-oriented to reflect a positive list of traits. Our rational for the negative orientation was that persons tend to leave specific jobs because they perceive that the negative aspects negate the job's positive traits. Persons tend to leave former positions for better jobs, whatever "better" happens to mean to a specific individual. Or, as in the cases of most married women, the job satisfaction may be high, but family factors precede all other factors—as is apparently well established.

In summary, any investigator may adapt the basic format of this information system best to meet his research purposes. IF ANY OF THE ABOVE CHANGES ARE MADE IN THE SURVEY INSTRUMENT, APPROPRIATE CHANGES MUST BE MADE IN THE COMPUTER PROGRAMS! Investigators who make drastic changes will find that the data may be no longer comparable on a national basis.



## APPENDIX C

A STUDY OF TEACHER MOBILITY USING THE IBM 1130 MODEL II-B COMPUTER WITH DISK DRIVE AND 1132 PRINTER

## I. Introduction

## A. Problem Description

This program is a study of teacher mobility using the IBM 1130 Model II-B Computer with disk drive and 1132 Printer. The objectives of this program are to analyze the coded questionnaire data which indicate important reasons influencing instructors to leave their teaching positions for new jobs.

## B. Method of Solution

This process begins with the survey forms (see Appendix A, Questionnaire) which were developed for the study. These forms must be received, keypunched and put through the program developed to produce the resultant frequency tables. The survey forms are analyzed in three parts. Part I: Questions 1 to 9 and questions 16 and 17 are grouped as Part I. Frequencies are produced on this portion for males out of state, males in state, females out of state, and females in state. Parts II and III are analyzed for these same sub-groups with three more tables being produced. The first is developed as a by-product of Part III. This table is the computation of a critical index for the four groups: females, males, respondents moving instate, and those moving out of state. The second table is a frequency count on the academic major and academic minor degrees held by The third table consists of both a the teachers. list of the identification numbers taken from the cards of respondents with residences in states other than the nine listed in the questionnaire and a frequency count on the nine states that are listed.

C. For the system's flow chart, see Figure A-1.

#### II. Instructions

#### A. User

First, the academic majors and minors must be hand coded with three digit identification numbers, which are not to exceed 50. Next, the survey form must be submitted to the Computer Center to be



keypunched. Unless changes are made in the program, the forms must be identical to the 1967-68 Teacher Mobility Forms. Of course, the dates and headings could be changed, but the questions must remain in the same order or the results will be wrong. Before making any changes, please consult the section of this writeup on Operation and Program Documentation.

Keypunching of the forms is explained in the Data Presentation section. It will suffice here to say that in scheduling, time must be allotted for reading the data.

The tables produced by the program are included in Appendix D.

The program function has been explained as an analysis of the Teacher Mobility Survey. This function produces eleven tables of frequency counts and one table of critical indexes, totaling in all, 12 tables. Each table is assigned a sense switch to determine whether to print the table or not. See page 174 for the list of switches.

This program consists of the mainline program with three sub-routines (OUT1, OUT2, OUT3, OUT4). Together, this mainline with the subroutines produces the 16 tables in their entirety.

## B. Data Preparation

A copy of the survey form appears on the following pages. This form is so designed that the question numbers correspond to the card columns. Each response, except academic major and academic minor (items 10-11-12 and 13-14-15) take one column while the major and minor each take three columns. (Example: 730 is the code number for a major in music.) The complete survey form takes 76 columns of one card, the four remaining columns are sometimes used for identification numbers.

After keypunching, the data needs no further sorting.

## C. Operating Instructions

The beginning of one card to the beginning of another takes approximately 4 seconds on the average. This figure was obtained by running 800 cards of data through the program. This includes the time required for loading, run and output. A minimum of 55 minutes must be allotted to: load the program with its sub-routines, load 800 cards of data, and list the output.

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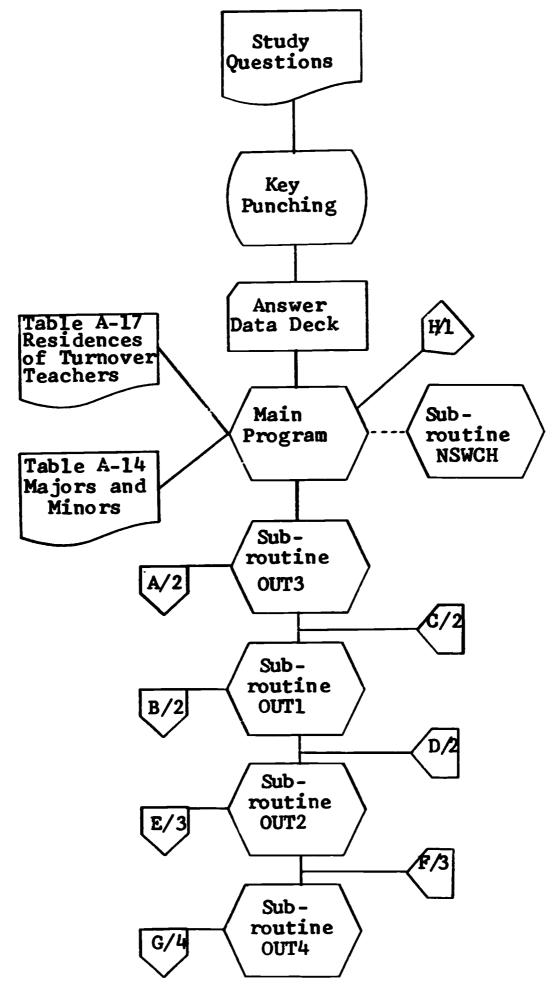
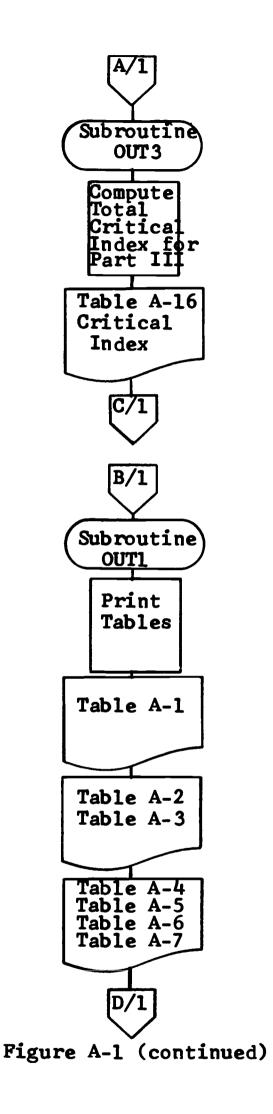


Figure A-1. Systems Flow Chart.



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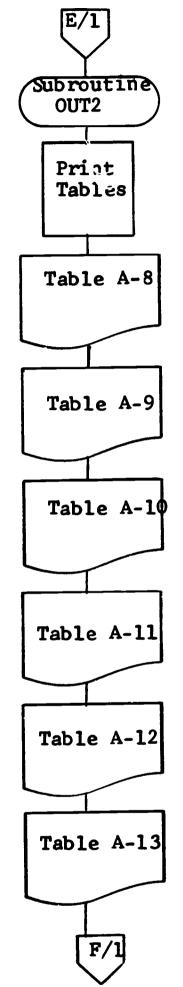


Figure A-1 (continued)

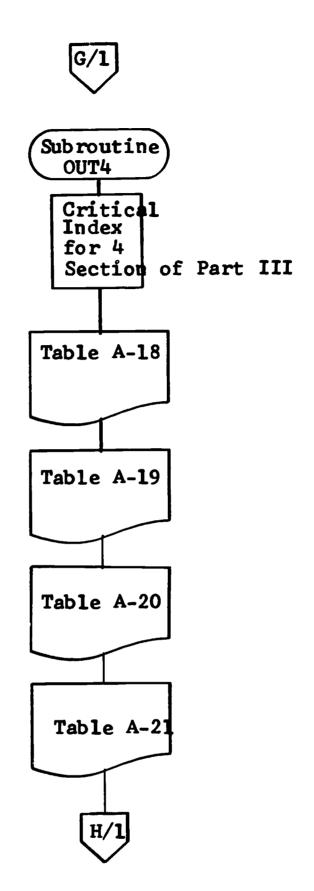


Figure A-1 (continued)

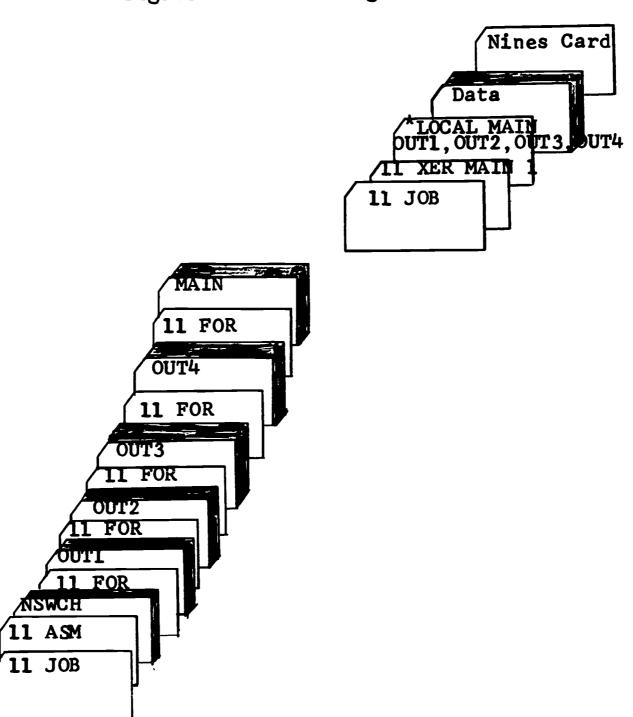
This program was made to print on 8-1/2 by 11 inch paper with double side tear. The width and/or length could be more, but never less; unless the output formats are changed.

There are no required card forms, files or tapes.

The three subroutines (OUT1, OUT2, OUT3, OUT4) must be loaded first. After the sub-routines are stored on the disk, load the Main program. The Main if followed by all the data cards which in turn must be followed by a card with a nine punched into column 1. The control cards required are: cold start card, //JOB, //XEQ MAIN, \*LOCAL MAIN, OUT1, OUT2, OUT3, OUT4.

The three sub-routines (OUT1, OUT2, OUT3, OUT4) must be loaded first.

Figure A-2. Deck Organization



## THE SENSE SWITCHES (ON TO SUPKESS PRINTING)

Switch	Numl	bei	•				Table
0	• •	•	•	•	•	•	Four tables giving total percents and responses for males, females, instate and outstate for Part 3.
1	• •	•	•	•	•	•	Questionnaire number of people with residences in states other than the nine listed in the questionnaire.
2		•	•	•	•	•	Frequency count on the nine states that are listed in the questionnaire.
3		•	•	•	•	•	Critical index.
4		•	•	•	•	•	1-A (males instate, males outstate, females instate, females outstate).
5		•	•	•	•	•	2-A (males instate, males outstate, females instate, females outstate).
6		•	•	•	•	•	3-A (males instate, males outstate, females instate, females outstate).
7		•	•	•	•	•	1-B (males total).
8		•	•	•	•	•	1-B (females total).
9		. •	•	•	•	•	2-B (males total).
10		•	•	•	•	•	2-B (females total).
11		•	•	•	•	•	3-B (males total, females total).
12			•	•	•	•	1-C (both males and females).
13		•	•	•	•	•	2-C (both males and females).
14			•	•	•	•	3-C (both males and females).
15	•		•	•	•	•	Academic majors and minors.
*Load s of NSW		rou	ti	ne	N	SW	CH before execution; see documentation

ERIC Fronted by ERIC

<sup>-175-</sup>

```
// JOB
                     SUBROUTINE OUT1 OF TEACHER MOBILITY STUDY
// FOR
*ONE WORD INTEGERS
*TRANSFER TRACE
*ARITHMETIC TRACE
       TEACHER MOBILITY STUDY
**
       JUNE 1968
**
       LARRY CURTIS-PROGRAMMER
**
      SUBROUTINE OUT1
       LARRY CURTIS-PROGRAMMER-IDAHO STATE UNIVERSITY-AUGEST 1968
C
      DIMENSION ID(10)
      COMMON IPD(11,10,4), ILE(40,5,4), IPL(19,10,4)
  822 FORMAT(5X,4(6X,11,2H'5)8X,'X')
  888 FORMAT(5X,13,16,419)
                                                                   4
  999 FORMAT(5X+13+1016)
  823 FORMAT(10X, "X- THOSE WHO DID NOT RESPOND")
  820 FORMAT(11X,9(11,2H'S,3X)2X,'X')
   28 FORMAT(1H1,20X, TABLE A-2. MALE RESPONSES TO PART II')
 5001 FORMAT(1H1,20X, TABLE A-3. FEMALE RESPONSES TO PART II')
  816 FORMAT(/,28X, MALES IN THE STATE )
  817 FORMAT(/,28X, FEMALES OUT OF STATE !)
  818 FORMAT(/,28X, FEMALES IN THE STATE !,)
   23 FORMAT(1H1, 5X, TABLE A-4. OUT OF STATE MALE RESPONSES TO PART III
     91)
  912 FORMAT(1H1. 5X. TABLE A-7. INSTATE FEMALE RESPONSES TO PART III')
  810 FORMAT(1H1, 5X, TABLE A-5. INSTATE MALE RESPONSES TO PART III')
  811 FORMAT(1H1, 5X, TABLE A-6. OUT OF STATE FEMALE RESPONSES TO PART I
     8111)
   21 FORMAT(1H1:15X: TABLE A-1: MALE AND FEMALE RESPONSES TO PART I')
   22 FORMAT(/,28X, MALES OUT OF STATE!,)
      PRINT HEADINGS
      WRITE(3,21)
      WRITE (3,816)
      WRITE(3,820)(I,I=1,9)
      K=2
      DO 113 JK=1.4
      IK=1
      DO 115 I =1.11
      PUT DATA FROM ARRAY IPD INTO ARRAY ID
C
      DO 114 J = 1.10
      ID(J)=IPD(I \bullet J \bullet K)
  114 CONTINUE
      CHECK IF SWITCH 4 IS ON. IF IT IS DON'T PRINT THE ARRAY
       IF(NSWCH(4))115,450,450
      PRINT THE ARRAY
  450 WRITE(3,999) IK, (ID(L), L=1,10)
       IF(IK-9)1080,1081,1080
 1081 IK=IK+6
 1080 IK=IK+1
  115 CONTINUE
       IF(JK-2)1,2,3
    1 K=4
       GO TO 4
     2 K=1
       GO TO 4
     3 K=3
       IF(JK-4)4,7000,4
 7000 K=2
     4 CONTINUE
                                      -176-
```

```
C
      PRINT PROPER HEADINGS
      GO TO(814,113,815,813),K
  813 WRITE(3,818)
      WRITE(3,820)(I,I=1,9)
      GO TO 113
  814 WRITE(3,22)
      WRITE(3.820)(I.I=1.9)
      GO TO 113
  815 WRITE(3,817)
      WRITE(3,820)(I,I=1,9)
  113 CONTINUE
      WRITE(3,823)
C
      PRINT HEADINGS
      WRITE(3,28)
      WRITE(3,22)
      WRITE(3,820)(I,I=1,9)
      DO 654 K=1.4
      IK=18
      DO 119 I=1.19
C
      PUT DATA FROM ARRAY IPL INTO ARRAY ID
      DO 118 J=1.10
      ID(J)=IPL(I,J,K)
  118 CONTINUE
      CHECK IF SWITCH 5 IS ON. IF IT IS DON'T PRINT THE ARRAY
      IF(NSWCH(5))119,431,431
C
      PRINT THE ARRAY
  431 WRITE(3,999) IK, (ID(L), L=1,10)
      IK=IK+1
  119 CONTINUE
      CHECK AND PRINT THE PROPER HEADINGS
C
      GO TO(801,802,803,654),K
  801 WRITE(3,816)
      WRITE(3,820)(I,I=1,9)
      GO TO 654
  802 WRITE (3.823)
      WRITE(3,5001)
      WRITE(3.817)
      WRITE(3.820)(I.I=1.9)
      GO TO 654
  803 WRITE(3,818)
      WRITE(3,820)(I,I=1,9)
  654 CONTINUE
      WRITE(3,823)
      WRITE(3,23)
      WRITE(3.822)(I.I=1.4)
      DO 776 K=1.4
      IK=37
      DO 117 I=1,40
      PUT DATA FROM ARRAY ILE INTO ARRAY ID
      DO 116 J=1.5
      ID(J)=ILE(I,J,K)
  116 CONTINUE
      CHECK IF SWITCH 6 IS ON, IF IT IS DON'T PRINT THE ARRAY
      IF(NSWCH(6))117,432,432
      PRINT THE ARRAY
  432 WRITE(3,888) IK, (ID(L), L=1,5)
      IK = IK + 1
 117 CONTINUE
      WRITE(3.823)
```

```
CHECK AND PRINT THE PROPER HEADINGS
C
      GO TO(8C7.8C8.809.776).K
  807 WRITE(3.810)
      WRITE(3,822)(I,I=1,4)
      GO TO 776
  808 WRITE(3,811)
      WRITE(3,822)(I,I=1,4)
      GO TO 776
  809 WRITE(3,812)
      WRITE(3,822!(I,I=1,4)
  776 CONTINUE
      RETURN
      END
// DUP
           WS UA OUT1
#STORE
```

```
// JOB
                    SUBROUTINE OUT2 OF TEACHER MOBILITY STUDY
// FOR
*ARITHMETIC TRACE
*TRANSFER TRACE
*ONE WORD INTEGERS
       TEACHER MOBILITY STUDY
**
       JUNE 1968
##
       LARRY CURTIS-PROGRAMMER
**
      SUBROUTINE OUT2
       LARRY CURTIS-PROGRAMMER-IDAHO STATE UNIVERSITY-AUGEST 1968
C
      DIMENSION IC(10), ID(10)
      COMMON IPD(11,10,4), ILE(40,5,4), IPL(19,10,4)
  822 FORMAT (5X+4(6X+11:2H'S)6X+'X')
   77 FORMAT (5X+13+16+419+)
  823 FORMAT(10X, "X- THOSE WHO DID NOT RESPOND")
  890 FORMAT(10X,4(I1,2H'S,2X),2X,'X',13X,4(I1,2H'S,2X),2X,'X',)
  203 FORMAT(1H1,10X, TABLE A-E. MALE AND FEMALE TOTALS TO PART I')
  201 FORMAT(1H1,10X, TABLE A-9. MALE AND FEMALE TOTALS TO PART II')
  202 FORMAT(/+12X+ MALES TOTAL + 25X+ FEMALES TOTAL )
  391 FORMAT(5X,13,1015)
 1180 FORMAT(/,18X, 'FEYALES TOTAL',)
  205 FORMAT(/,18X, MALES TOTAL )
  899 FORMAT(10X+9(11+2H'5+2X+)+2X+1X')
  867 FORMAT(5X,13,515,5X, 1*1,5X,515)
  207 FORMAT(1H1,22X, 'TABLE A-12. ALL RESPONSES TO PART II')
  206 FORMAT(1H1, 7X, TABLE A-13, ALL RESPONSES TO PART III')
   78 FORMAT(5X,13,1016)
  820 FORMAT(11X.9(I1.2H'S.3X)2X.1X')
  208 FCRMAT(1H1,22X, TABLE A-11. ALL RESPONSES TO PART I')
 1220 FORMAT(/,18x,'FEMALES TOTAL')
  204 FORMAT(1H1:13X: TABLE A-1C: MALE AND FEMALE TOTALS TO PART III')
       PRINT HEADINGS
C
       WRITE(3.203)
       WRITE(3.205)
       WRITE(3,899)(I,I=1,9)
       IK=1
       DO 147 I=1,11
       PUT THE IN AND OUT OF STATE MALES TOGETHER INTO ARRAY ID
       DO 333 J=1,10
       ID(J)=IPD(I+J+1)+IPD(I+J+2)
   333 CONTINUE
       CHECK IF SWITCH 7 IS ON, IF IT IS DON'T PRINT THE ARRAY
       IF(NS) CH(7))147,433,433
       PRINT THE ARRAY
   433 WRITE(3,391)IK,(ID(L),L=1,10)
       IF(IK-9)1190,1191,1190
  1191 IK=IK+6
  1190 IK=IK+1
   147 CONTINUE
       WRITE(3,1180)
       WRITE(3,899)(I,I=1,9)
       IK=1
       PUT THE IN AND OUT OF STATE FEMALES TOGETHER INTO ARRAY ID
 C
       DO 1184 I=1+11
       DO 1185 J=1,10
       ID(J)=IPD(I+J+3)+IPD(I+J+4)
  1185 CONTINUE
       CHECK IF SWITCH 8 IS ON, IF IT IS DON'T PRINT THE ARRAY
       IF(NSWCH(8))1184,1187,1187
                             -179-
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PRINT THE ARRAY
 1187 WRITE(3,391) IK, (ID(L), L=1,10)
      IF(IK-9)1200,1201,1200
 1201 IK=IK+6
 1200 IK=IK+1
 1184 CONTINUE
      WRITE(3,823)
      WRITE(3,201)
      WRITE(3,205)
      WRITE(3,899)(I,I=1,9)
      IK=18
      DO 369 I=1.19
      PUT THE IN AND OUT OF STATE MALES TOGETHER INTO ARRAY ID
C
      DO 444 J=1,10
      ID(J)=IPL(I \bullet J \bullet I)+IPL(I \bullet J \bullet Z)
  444 CONTINUE
      CHECK IF SWITCH 9 IS ON, IF IT IS DON'T PRINT THE ARRAY
      IF(NSWCH(9))369,434,434
      PRINT THE ARRAY
C
  434 WRITE(3,391)[K,(ID(J),J=1,10)
      IK = IK + 1
  369 CONTINUE
      WRITE(3.1220)
      WRITE(3,899)(I,I=1,9)
      IK=18
      DO 1221 I=1,19
      PUT THE IN AND OUT OF STATE FEMALES TOGETHER INTO ARRAY ID
      DO 1222 J=1,10
      ID(J)=IPL(I,J,3)+IPL(I,J,4)
 1222 CONTINUE
      CHECK IF SWITCH 10 IS ON, IF IT IS DON'T PRINT THE ARRAY
      IF(NSWCH(10))1221,1224,1224
      PRINT THE ARRAY
 1224 WRITE(3,391) IK, (ID(J), J=1,10)
      IK=IK+1
 1221 CONTINUE
      WRITE(3,823)
      WRITE(3,204)
      WRITE(3,202)
      WRITE(3,890)(I,I=1,4),(I,I=1,4)
      IK=37
      DO 258 I=1.40
      PUT THE IN AND OUT OF STATE MALES TOGETHER INTO ARRAY ID
      PUT THE IN AND OUT OF STATE FEMALES TOGETHER INTO ARRAY IC
      DO 222 J=1.5
      ID(J)=ILE(I,J,1)+ILE(I,J,2)
      IC(J)=ILE(I,J,3)+ILE(I,J,4)
  222 CONTINUE
      CHECK IF SWITCH 11 IS ON. IF IT IS DON'T PRINT THE ARRAY
C
       IF(NSWCH(11))258,435,435
      PRINT THE ARRAY
  435 WRITE(3,867) IK, (ID(L), L=1,5), (IC(L), L=1,5)
      IK=IK+1
  258 CONTINUE
       CHECK AND PRINT THE PROPER HEADINGS
      WRITE(3,823)
      WRITE(3,208)
       WRITE(3,820)(I,I=1,9)
       IK=1
```

-180-

```
DO 241 I=1,11
      PUT THE MALES AND FEMALES TOGETHER INTO ARRAY ID
C
      00 357 J=1,10
      ID(J)=IPD(I,J,1)+IPD(I,J,2)+IPD(I,J,3)+IPD(I,J,4)
  357 CONTINUE
      CHECK IF SWITCH 12 IS ON. IF IT IS DON'T PRINT THE ARRAY
      IF(NSWCH(12))241,436,436
      PRINT THE ARRAY
  436 WRITE(3,78)[K,(ID(L),L=1,10)
      IF(IK-9)1324,1225,1324
 1225 IK=IK+6
 1324 IK=IK+1
  241 CONTINUE
      CHECK AND PRINT THE PROPER HEADINGS
      WRITE(3,823)
      WRITE(3,207)
      WRITE(3,820)(I,I=1,9)
      IK=18
      DO 240 I=1,19
      PUT THE MALES AND FEMALES TOGETHER INTO ARRAY ID
C
      DO 457 J=1,10
      ID(J)=IPL(I,J,1)+IPL(I,J,2)+IPL(I,J,3)+IPL(I,J,4)
  457 CONTINUE
      CHECK IF SWITCH 13 IS ON. IF IT IS DON'T PRINT THE ARRAY
      IF(NSWCH(13))240,437,437
      PRINT THE ARRAY
C
  437 WRITE(3,78) IK, (ID(L), L=1,10)
      IK=IK+1
  240 CONTINUE
      CHECK AND PRINT THE PROPER HEADINGS
      WRITE(3,823)
      WRITE(3,206)
      WRITE(3,822)(I,I=1,4)
      IK=37
      DO 242 I=1,40
      PUT THE MALES AND FEMALES TOGETHER INTO ARRAY ID
C
      DO 1 J=1,5
      ID(J)=ILE(I,J,1)+ILE(I,J,2)+ILE(I,J,3)+ILE(I,J,4)
    1 CONTINUE
      CHECK IF SWITCH 14 IS ON. IF IT IS DON'T PRINT THE ARRAY
C
      IF(NSWCH(14))242,438,438
      PRINT THE ARRAY
C
  438 WRITE(3,77) [K, (ID(L), L=1,5)
       IK = IK + 1
  242 CONTINUE
      WRITE(3,823)
      RETURN
      END
// DUP
            WS UA OUT2
*STORE
```

```
// JOB
// FCR
                     SUBROUTINE OUT3 OF TEACHER MOBILITY
*ARITHMETIC TRACE
*TRANSFER TRACE
*ONE WORD INTEGERS
       TEACHER MOBILITY STUDY
**
**
        JUNE 1968
       LARRY CURTIS-PROGRAMMER
##
      SUBROUTINE OUT3
       LARRY CURTIS-PROGRAMMER-IDAHO STATE UNIVERSITY-AUGEST 1968
C
      CCMMON IPD(11,10,4), ILE(40,5,4), IPL(19,10,4)
C
      ZERO OUT THE VARIBLES USED
      K=0
      SUM1=0
      SUV2=0
      SUM3=0
      SUM4=0
      SUM11=0
      SUM22=0
      SUM44=0
      SUM33=0
      PRINT HEADINGS
      WRITE(3,1101)
 1101 FORMAT( 11 , 15x , TABLE A-16 . , 4x , CRITICAL INDEX FOR TEACHER TURNOV
     1ER!)
      WRITE(3.1103)
 1103 FORMAT(26X, MALES', 5X, FEMALES', 6X, OUT STATE', 7X, INSTATE')
      CHECK IF SWITCH 3 IS ON. IF IT IS DON'T PRINT THE ARRAY
      IF(NSWCH(3))1061,1060,1061
 1060 DO 1041 I=1,40
      DO 1062 J=1.4
      COMPUT THE UNWEIGHTED SUMS FOR PART III
C
      SUM1=SUM1+ILE(I,J,1)
      SUM2=SUM2+ILE(I.J.2)
      SUM3=SUM3+ILE(I,J,3)
      SUM4=SUM4+ILE(I.J.4)
 1062 CONTINUE
      DO 1040 J=2.4
      COMPUT THE WEIGHTED SUMS FOR PART III
C
      SUM11=SUM11+ILE(I,J,1)*(J-1)
      SUM22=SUM22+ILE(I,J,2)*(J-1)
      SUM33=SUM33+ILE(I.J.3)*(J-1)
      SUM44=SUM44+ILE(I,J,4)*(J-1)
 1040 CONTINUE
      DECIDE WETHER THE GROUP ANSWER SHOULD BE PRINTED AT THIS TIME
      IF(I-5)1041,1048,1047
 1047 IF(I-13)1041,1048,1049
 1049 IF(I-18)1041,1048,1051
 1051 IF(I-25)1041,1C48,1053
 1053 IF(I-30)1041,1048,1055
 1055 IF(I-40)1041,1048,1041
 1048 K=K+1
      COMBINE DIFFERENT LEVELS TO GIVE MALES . FEMALES . INSTATE . OUTSTATE
C
       ANSW1=SUM11/SUM1
       ANSW2=SUM22/5UM2
       ANSW3=SUM33/SUM3
       ANSW4=SUY44/SUY4
       COMPUT THE CRITICAL INDEX FOR THE ABOVE GROUPINGS
C
       CR1=(ANSW1+ANSW2)/2
```

```
CR2=(ANSW3+ANSW4)/2
      CR3=(A\SW1+ANSW3)/2
      CR4=(ANSW2+ANSW4)/2
      PRINT HEADINGS AND THE RESULTS
C
      GO TO(1,2,3,4,5,6),K
    1 WRITE(3,1104)
 1104 FORMAT(/5X, 'ADMINISTRATIVE AND')
      WRITE(3,1112)CR1,CR2,CR3,CR4
 1112 FORMAT (5x, 'SUPERVISORY FACTORS', 3x, F4, 2, 8x, F4, 2, 10x, F4, 2, 10x, F4, 2)
      GO TO 1058
    2 WRITE(3,1105)CR1,CR2,CR3,CR4
 1105 FORMAT (/5X+ COMMUNITY FACTORS + .5X+F4.2+8X+F4.2+10X+F4.2+10X+F4.2)
      GO TO 1058
    3 WRITE(3.1110)CR1.CR2.CR3.CR4
 1110 FORMAT(/5X, ECONOMIC FACTORS , 6X, F4.2, 8X, F4.2, 10X, F4.2, 10X, F4.2)
      GO TO 1058
    4 WRITE(3,1106)
 1106 FORMAT(/5X, 'PERSONAL AND',)
      WRITE(3,1114)CR1,CR2,CR3,CR4
 1114 FORMAT(5X, FAMILY FACTORS 1,8X,F4.2,8X,F4.2,10X,F4.2,10X,F4.2)
      GO TO 1058
    5 WRITE(3,1108)CR1,CR2,CR3,CR4
 1108 FORMAT(/,5x, PUPIL FACTORS',8x,F5,2,8x,F4,2,10x,F4,2,10x,F4,2)
       GO TO 1058
    6 WRITE(3,1109)CR1,CR2,CR3,CR4
 1109 FORMAT (/5x, WORKING CONDITIONS', 4x, F4, 2, 8x, F4, 2, 10x, F4, 2, 10x, F4, 2)
      ZERO OUT THE VARIBLES USED AGAIN
 1058 SUM1=0
       SUM2=0
       SUM3=0
       SUM4=0
       SUM11=C
       SUM22=0
       SUM33=0
       SUM44=0
 1041 CONTINUE
 1061 RETURN
       END
// DUP
             WS UA OUT3
*STORE
```

```
// JOB
                    SUBROUTINE OUT4 OF TEACHER MOBILITY
// FOR
*ONE WORD INTEGERS
       TEACHER MOBILITY STUDY
##
        JUNE 1968
**
       LARRY CURTIS-PROGRAMMER
##
      SUBROUTINE OUT4
       LARRY CURTIS-PROGRAMMER-IDAHO STATE UNIVERSITY-AUGEST 1968
C
      DIMENSION IMA(40,4,4)
      COMMON IPD(11,10,4), ILE(40,5,4), IPL(19,10,4)
      CHECK IF SWITCH O IS ON, IF IT IS DON'T PRINT THE TABLES
C
      IF(NSWCH(0))1000 • 1001 • 1001
      PRINT PROPER HEADINGS
 1001 WRITE(3,203)
  203 FORMAT(1H1:15X: TABLE A-18: CRITICAL INDEX FOR ALL MALES!)
      WRITE(3,601)
  601 FORMAT(16X, 'NUMBERS', 16X, 'PERCENTS')
      WRITE(3,201)
  201 FORMAT(10X+'N'+4X+'S'+4X+'M'+4X+'D'+5X+'N'+5X+'S'+5X+'M'+5X+'D'+5X
     9, TOTAL ', 4X, WEIGHT')
      WRITE(3,401)
  401 FORMAT(/16X, ADMINSTRATIVE AND SUPERVISORY FACTORS!)
      COMBINE THE MALES TOGETHER, THE FEMALES TOGETHER, THE INSTATE
C
      TOGETHER AND THE OUT OF STATE TOGETHER.
C
      K=0
      LP=1
      KP=2
      DO 1 J=1,4
      DO 2 I=1,40
      DO 3 L=1,4
    3 IMA(I+L+J)=ILE(I+L+LP)+ILE(I+L+KP)
    2 CONTINUE
      K=K+1
      GO TO(5,6,7,1),K
    5 LP=3
      KP=4
      GO TO 1
    6 LP=1
      KP=3
      GO TO 1
    7 LP=2
      KP=4
    1 CONTINUE
      LP=1
      KP=2
      DO 30 J=1.4
       INO=36
      DC 12 I=1.40
       INO=INC+1
       COMPUTE THE TOTAL UNWEIGHTED RESPONSES
C
       (Letel)AMI+(Letel)AMI+(Letel)AMI+(Letel)AMI+(Letel)AMI=JOTI
       COMPUTE THE TOTAL WEIGHTED RESPONSES
C
       IWET=IMA(I,2,J)*1+IMA(I,3,J)*2+IMA(I,4,J)*3
       COMPUTE THE PERCENTAGES
C
       PER1=1.*IMA(I.1.J)/ITOL
       PER2=1.*IMA(I.2.J)/ITOL
       PER3=1.*IMA(I:3:J)/ITOL
       PER4=1.*IMA(I,4,J)/ITOL
                                CENTS. TOTAL AND WEIGHT FOR THE QUESTION
```

ERIC

```
WRITE(3,200) INO. IMA(I,1,1). IMA(I,2,J). IMA(I,3,J). IMA(I,4,J). PER1.P
     1ER2, PER3, PER4, ITOL, IWET
  200 FORMAT(5x,12,2x,13,2x,13,2x,13,2x,13,3x,F4,2,2x,F4,2,2x,F4,2,2x,F4
     7.2,4X,13,7X,13)
      PRINT PROPER HEADINGS
C
      IF(I-5)1041,1042,1047
 1047 IF(I-13)1041,1043,1049
 1049 IF(I-18)1041,1044,1051
 1051 IF(I-26)1041,1045,1053
 1053 IF(I-30)1041,1046,1055
 1055 IF(I-40)1041,1041,1041
 1042 WRITE(3,402)
                     COMMUNITY FACTORS!)
  402 FORMAT (/16X.
      GO TO 11
 1043 WRITE(3,403)
                     ECONOMIC FACTORS')
  403 FORMAT(/16X.
      GO TO 11
 1044 WRITE(3,404)
                      PERSONAL AND FAMILY FACTORS!)
  404 FORMAT(/16X,
      GO TO 11
 1045 WRITE(3,405)
                      PUPIL FACTORS')
  405 FORMAT(/16X+
      GO TO 11
 1046 WRITE(3,406)
  406 FORMAT(/16X, WORKING CONDITIONS!)
 1041 CONTINUE
   11 CONTINUE
   12 CONTINUE
       CHECK WHICH HEADING TO PRINT
      PRINT PROPER HEADINGS
       IF(J-4)32,30,30
   32 IF(J-2)50,51,52
   50 WRITE(3,205)
  205 FORMAT (1H1,15X, 'TABLE A-19. CRITICAL INDEX FOR ALL FEMALES')
       WRITE(3,601)
       WRITE(3,201)
       WRITE(3,401)
       GO TO 30
    51 WRITE(3,301)
   301 FORMAT(1H1,10X, TABLE A-20. CRITICAL INDEX FOR THOSE LEAVING IDAHO
      81)
       WRITE(3,601)
       WRITE(3,201)
       WRITE(3,401)
       GO TO 30
    52 WRITE(3,204)
   204 FORMAT(1H1+10X+ TABLE A-21+ CRITICAL INDEX FOR THOSE REMAINING IN
      7IDAHO!)
       WRITE(3,601)
       WRITE(3,201)
       WRITE(3,401)
    30 CONTINUE
  1000 RETURN
       END
 // DUP
             WS UA OUT4
 *STORE
```

```
// JOB
                    MAIN LINE PROGRAM OF TEACHER MOBILITY STUDY
// FOR
*IOCS(DISK:1132 PRINTER)
*ONE WORD INTEGERS
       LARRY CURTIS-PROGRAMMER
       JUNE 1968
**
       TEACHER MOBILITY STUDY
**
       LARRY CURTIS-PROGRAMMER-IDAHO STATE UNIVERSITY-AUGEST 1968
      INTEGER BLURP.SEX
      DIMENSION IC(80) , IN(70,6) , IZT(9,2)
      COMMON IPD(11.10.4). ILE(40.5.4). IPL(19.10.4)
      EQUIVALENCE(IC(13),IC13),(IC(32),IC32),(IC(10),IC10)
      DEFINE FILE 1(1000,73,U,KA39)
      ZERO OUT THE ARRAYS
C
      DO 90 K=1,4
      CALL TSTOP
      DO 91 J=1:10
      DO 80 I=1,11
   80 IPD(I,J,K)=0
      DO 91 I=1,19
   91 IPL(I,J,K)=0
      DO 90 N=1,5
      DO 90 I=1,40
   90 ILE(I.N.K)=0
      DO 53 J=1,70
      DO 53 I=1.6
   53 IN(J+I)=0
      DO 1111 I=1.9
      DO 1111 L=1.2
 1111 IZT(I+L)=0
  870 FORMAT(11X, MALES-FEMALES---MAJOR, 8X, MALES-FEMALES---MINOR, )
   55 FORMAT(5X.13.318.5X.318)
 1010 FORMAT(18X, 14, 28X, 14)
  212 FORMAT(2H1 ,6X, 'TABLE A-14. RESPONDENTS', 1H', ' MAJORS AND MINORS--
     BBY CODE NUMBER!)
 1302 FORMAT(1H1,11X, TABLE A-17. THE 1967-1968 RESIDENCES OF IDAHO 1966
     9-6711
 1303 FORMAT(27X, TURNOVER TEACHERS')
 1304 FORMAT(15X, FREQUENCY + 16X, CODE NUMBER OF THE STATE !)
 1301 FORMAT(1H1.5X. QUESTIONNAIRE NUMBER OF PEOPLE IN STATES OTHER THAN
     1 THE NINE LISTED')
      WRITE(3,1301)
      BLURP=0
      O=NMLAM
      O=LMNIM
       LOC=1
   98 J=0
       READ ONE CARD AT A TIME
       READ(1'LOC)(IC(I), I=1,9), IC10, IC13, (IC(I), I=16,76), IC(80)
       LOC=LOC+1
    37 K=0
C
       CHECK FOR A NINE CARD
       IF(IC(1)-9)48,110,48
       IF NO RESPONSE IN ANY COLUMN OF THE CARD REGISTER A 10
C
    48 DC 99 I=1.76
       IF(IC(I))99,20,99
    20 IC(I)=10
    99 CONTINUE
       DECIDE WHICH LEVEL OF THE THREE DIMEMSIONAL ARRAYS EACH CARD IS TO BE SENT
                                        -186-
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```
SEND THEM TO LEVEL ONE IF IT IS AN OUT OF STATE MALE
C
      SEND THEM TO LEVEL TWO IF IT IS AN IN STATE MALES
      SEND THEM TO LEVEL THREE IF IT IS AN OUT OF STATE FEMALES
      SEND THEM TO LEVEL FOUR IF IT IS AN IN STATE FEMALES
      IF(IC(1)-1)4,4,2
    2 K=K+2
    4 IF(IC32-1)6,6,5
    5 K=K+1
      GO TO 10
      COMPUTE THE FREQUENCY OF PART I
C
    6 K=K+2
   10 DO 100 I=1,9
      M=IC(I)
  100 IPD(I+M+K)=IPD(I+M+K)+1
      DO 101 I=16,17
      M=IC(I)
      N=I-6
  101 IPD(N.M.K)=IPD(N.M.K)+1
      COMPUTE THE FREQUENCY OF PART II
      DO 103 I=18.36
      M=IC(I)
      N = I - 17
  103 IPL(N,M,K)=IPL(N,M,K)+1
      COMPUTE THE FREQUENCY OF PART III
C
      DO 498 1=37,76
      M=IC(I)
      CHANGE ANY 10'S TO 5'S
C
      IF(M-10)69,68,69
   68 M=5
   69 N=I-36
       ILE(N,M,K)=ILE(N,M,K)+1
  498 CONTINUE
      PRINT THE QUESTIONARRIE NUMBER OF ANY CARD WHICH COMES FROM A PERSON IN
C
      A STATE OTHER THEN THE NINE LISTED IN THE QUESTIONARRIE
C
       IF(IC(32)-10)1004,1020,1020
       CHECK IF SWITCH 1 IS ON, IF IT IS DON'T PRINT THE ARRAY
 1020 IF(NSWCH(1))1872,1871,1871
 1871 WRITE(3,1022)IC(80)
 1022 FORMAT(30X+I4)
 1872 CONTINUE
       COMPUTE THE FREQUENCY OF RESDENCE'S OF THE NINE STATES THAT ARE LISTED
       GO TO 1007
  1004 DO 1005 N=1.9
       IF(IZT(N,2)-IC(32))1005,1006,1005
  1006 IZT(N+1)=IZT(N+1)+1
       GO TO 1007
  1005 CONTINUE
       BLURP=BLURP+1
       IZT(BLURP+2)=IC(32)
       GO TO 1004
       COMPUTE THE FREQUENCY OF THE MAJORS
  1007 SEX=IC(1)
       IF(IC10)762,762,769
   769 DO 761 L=1.70
       IF(IN(L,3)-IC10)761,763,761
   763 IN(L,SEX)=IN(L,SEX)+1
       GO TO 762
   761 CONTINUE
       I+LYVIM=LMNIH
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```
IN(MINMJ,3)=IC10
     COMPUTE THE FREQUENCY OF THE MINORS
     GO TO 769
762 SEX=SEX+3
     IF(IC13)98,98,765
765 DO 766 L=1,70
     IF(IN(L,6)-IC13)766,767,766
767 IN(L,SEX)=IN(L,SEX)+1
     GO GET ANOTHER CARD
     GO TO 98
 766 CONTINUE
     1+NMLAM=NMLAM
     IN(MAJMN,6)=IC13
     GO TO 765
 110 CONTINUE
     CALL TSTRT
     CHECK IF SWITCH 2 IS ON. IF IT IS DON'T PRINT THE ARRAY
     IF(NSWCH(2))1008,1009,1009
1009 WRITE(3,1302)
     WRITE(3,1303)
     WRITE(3,1304)
     PRINT THE FREQUENCY OF RESEDENCE'S
     WRITE(3,1010)(IZT(I,1),IZT(I,2),I=1,9)
1008 CONTINUE
     CALL OUT3
     CALL OUT1
     CALL OUT2
     CALL OUT4
     SORT THE MAJORS AND MINORS INTO DESCENDING ORDER ACCORDING TO COUNT
     IND=70
     J=3
1802 KND=IND-1
1801 DO 1806 I=1,KND
     IF(IN(I,J)-IN(I+1,J):1803,1806,1806
1803 IT1=IN(I+J-2)
     IT2=IN(I,J-1)
     IT3=IN(I,J)
     IN(I,J-2)=IN(I+1,J-2)
     IN(I+J-1)=IN(I+1+J-1)
     (L \cdot I + I) N I = (L \cdot I) N I
     IN(1+1+J-2)=IT1
     IN(I+1.J-1)=IT2
     IN(I+1+J)=IT3
1806 CONTINUE
     IF(KND-1)1807,1807,1808
1808 KND=KND-1
     GO TO 1801
1807 IF(J-3)1809,1809,1810
1809 J=6
     GO TO 1802
1810 CONTINUE
     WRITE(3+212)
     WRITE(3,870)
      KND=MINMJ
      DO 46 I=1.KND
      CHECK IF SWITCH 15 IS ON. IF IT IS DON'T PRINT THE ARRAY
      IF(NSWCH(15))46,439,439
 439 CONTINUE
      PRINT THE MAJORS AND MINGRS
```

```
WRITE(3,55)I,(IN(I,J),J=1,6)

46 CONTINUE
CALL EXIT
END

// DUP

*STORE WS UA MAIN

// XEQ MAIN 2

*LOCALMAIN,OUT3,OUT1,OUT2,OUT4

*FILES(1,TCHMO)
```

### PRESENTATION OF TABULAR MATERIALS

The reader will note that the several tables which follow in Appendices C and D present tabulations of nearly all the data which were collected. Table A-1 presents the total tabulation of all responses to the first section (Part I) of the questionnaire. It will be noted that the placement of the tabular data corresponds to the questions asked on the questionnaire. Thus, line one has one set of figures, 230 in column 1, followed by a row of zeros. In the extreme left column is the questionnaire number, that is, "1." In comparing the data compiled on this question to the questionnaire, it will be observed that the 230 figure refers to the number of respondents who were male. Thus, each response is coded directly to the questionnaire item.

Other tables are arranged in a similar manner, yielding tabulations for various sub-groups. The method of interpreting Tables A-18 through A-21, Part III of the questionnaire, was discussed on pages 18 and 19. Presented in this manner, there are an unlimited number of ways to analyze the data. The investigators attempted to isolate factors that would have greater meaning to help those who are interested in understanding why Idaho teachers left their 1966-67 positions. Not all data are discussed in this study. However, the reader is urged to study the responses as reported in the various sub-groupings to gain other meaningful information concerning Idaho Turnover Teachers for the 1966-67 school year. The placement of the questionnaire in Appendix A has been designed to aid the reader in the interpretation of the data presented in the tables.

ERIC

TABLE A-1. MALE AND FEMALE RESPONSES TO PART I

				MALES	IN THE		Ē			
	1'5	215	315	415	5 5	615	7'5	8'5	915	X
1	167	0	0	0	0	0	0	0	0	0
2	10	155	0	1	0	0	0	0	0	1
3	16	53	68	21	8	0	0	0	0	1
4	45	62	41	14	2	0	0	0	0	1 3 1 1
5	13	45	42	17	17	9 2	6	6	11	1
6 7	7	67	32	41 32	15 36		1 29	1	0	1
8	0 3	10 29	35 33	31	32	24 19	29	0	0	Ö
9	1	15	11	27	5	49	4	16	38	1
16	60	106	i	ō	ó	ő	ŏ	0	0	ō
17	9	19	11	98	ì	7	3	19	Ŏ	Ŏ
	•				_	•	•	•		•
				FEMAL		THE STA	ATE			
	1'5	215	315	415	515	615	715	8 5	915	X
1	0	243	0	0	0	0	0	0	0	0
2	19	203	6	1	14	0	0	0	0	0
3	80	89	60	8	2	0	0	0	0	4
4	109	91	33	4	0	0	0	0	0	6
5	44	73	22	19	20	14	10	8	32	1
6	30	153	37	8	7	2	0	6	0	0
7	5	23	78	38 22	34	19	46 27	0	0	1
8	11	46	80 17	22 59	31 8	15 36	37 3	0 17	0 72	0 1 1
9 16	8 12 <b>7</b>	22 114	0	0	ő	0	0	ő	0	2
17	51	4	79	83	ĭ	Ö	4	19	ŏ	2 2
• '	-	~	• •	•	_		•			_
				MALES	OUT OF	STATE	Ē			
	1'5	215	3 <b>'</b> S	415	515	615	7'5	8 5	915	X
1	230	0	0	0	O	0	0	O	0	0
2	28	190	8	1	3	0	0	0	0	0
3	38	83	78	23	5	0	0	0	0	3 3
4	71	100	45	10	1	0	0	0	0	
5	12	102	48	26	14	13	6	6	3	0
6	4	111	37	49	24	1	2	2	0	0
7	1	11	83	53	41	23	18	0	0	0
8	4	47	98	38 24	20 7	16	7	0	0 98	0
9	3	17	8	24 0	ó	39 0	6 0	24 0	0	4
16 17	14 12	214 25	0 15	141	4	2	6	23	Ö	2 2
11	12	23	19	141	•	-			•	•
				FEMAL	ES OUT	OF STA	ATE			
	1 • 5	215	315	415	515	615	7'5	815	915	X
1	Ō	195	0	0	0	0	0	0	0	Q
2	38	140	8	1		0	0	0	0	0
3	97	58	27	7	8 2	0	0	0	0	4
4	125	47	14	2	0	0	0	0	0	7
	50	69	12	12	11	11	6	4	20	0
5 6 7	18	130	28	7	5 30	1	1	4	0	1
	0	23	68	36		13	25	0	0	0
8	7	57	72	21	17	3	16	0	0	Z
9	1	19	10	32	11	29	4	14	74	1 T
16 17	24 20	170	0	0	0	0	0	0 5	0	0 1 0 2 1 1
11	39 X- TH	10 SE WHO	78	62	0	0	0	7	U	1
	A- 171	JOE WHO	מוט נ	NOT RE	SPUND					

TABLE A-2. MALE RESPONSES TO PART II

				MALES	OUT OF	STATE				
	1'5	2'5	315	415	515	615	715	815	915	X
18	16	55	40	23	27	47	19	2	0	1
19	13	31	24	22	31	34	24	38	0	13
20	0	2	16	26	47	74	23	17	12	13
21	1	2	5	24	24	50	30	18	45	31
22	3	6	37	58	69	45	2	0	0	10
23	3	7	32	37	41	45	40	0	0	26
24	32	60	122	0	1	5	1	0	0	9
25	19	45	77	6	12	44	0	0	0	27
26	192	10	1	11	2	3	1	0	4	6
27	139	8	3	9	0	3	0	30	19	19
28	128	32	16	23	٤ 7	8	5	1	0	9
29	96	27	16	13		9	42	0	0	20
30	0	86	42	37	24	21	6	5	3	6 7
31	24	19	15	24	27	35	17	24	38	
32	0	3	12	3	7	10	51	31	46	67
33	5	9	2	10	2	10	21	10	3	158
34	146	79	0	0	0	0	0	0	0	5
35	80	37	20	6	34	15	32	0	0	6
36	17	9	10	90	2	1	52	19	2	28
				MA1 E E	IN THE	CTATE				
	1'5	215	315	MALES 4'S	IN THE	STATE 6'S	715	815	915	X
10	_	30	30	15	11	23	13	0	0	6
18 19	39 15	33	25	16	19	2 <i>5</i> 26	20	1	0	12
20	0	3	23	20	27	49	10	10	5	20
21	ŏ	1	15	10	21	53	23	10	9	25
22	3	12	51	30	32	26	1	0	í	11
23	2	5	25	29	34	34	23	Ö	ō	15
24	19	49	83	0	Õ	7	1	ŏ	Ö	8
25	16	33	69	3	6	28	ō	ŏ	ŏ	12
26	138		0,							7
		10	4	4	٥	2	2	٥	u	
27		10	4	4 10	0	2	2	0 17	0 12	
27 28	99	11	3	10	0	2	3	17	12	10
28	99 77	11 21	3 20	10 24	0 9	2 3	<b>3</b> 5	17 1	12 0	10 7
28 29	99 77 56	11 21 23	3 20 15	10 24 16	0 9 12	2 3 9	3 5 25	17 1 0	12 0 0	10 7 11
28 29 30	99 77 56 1	11 21 23 62	3 20 15 33	10 24 16 16	0 9 12 12	2 3 9 16	3 5 25 7	17 1 0 8	12 0 0 7	10 7 11 5
28 29 30 31	99 77 56 1 11	11 21 23 62 28	3 20 15 33 32	10 24 16 16 25	0 9 12 12 18	2 3 9 16 9	3 5 25 7 8	17 1 0 8 8	12 0 0 7 17	10 7 11 5 8
28 29 30 31 32	99 77 56 1 11 167	11 21 23 62 28 0	3 20 15 33 32 0	10 24 16 16 26 0	0 9 12 12 18 0	2 3 9 16 9	3 5 25 7 8 0	17 1 0 8 8	12 0 0 7 17	10 7 11 5 8 0
28 29 30 31 32 33	99 77 56 1 11 167	11 21 23 62 28 0 8	3 20 15 33 32 0	10 24 16 16 25 0	0 9 12 12 18 0	2 3 9 16 9 0 8	3 5 25 7 8 0 4	17 1 0 8 8 0 5	12 0 0 7 17 0 2	10 7 11 5 8 0 136
28 29 30 31 32 33	99 77 56 1 11 167 1	11 21 23 62 28 0 8 45	3 20 15 33 32 0 1	10 24 16 16 25 0	0 9 12 12 18 0 0	2 3 9 16 9 0 8 0	3 5 25 7 8 0 4	17 1 0 8 8 0 5	12 0 0 7 17 0 2	10 7 11 5 8 0 136
28 29 30 31 32 33 34 35	99 77 56 1 11 167 1 116 43	11 21 23 62 28 0 8 45 57	3 20 15 33 32 0 1 0	10 24 16 16 25 0 2	0 9 12 12 18 0 0	2 3 9 16 9 0 8 0 6	3 5 25 7 8 0 4 0 21	17 1 0 8 8 0 5 0	12 0 0 7 17 0 2 0	10 7 11 5 8 0 136 6 5
28 29 30 31 32 33	99 77 56 1 11 167 1 116 43 21	11 21 23 62 28 0 8 45	3 20 15 33 32 0 1 0 15	10 24 16 16 25 0	0 9 12 12 18 0 0 0	2 3 9 16 9 0 8 0	3 5 25 7 8 0 4	17 1 0 8 8 0 5	12 0 0 7 17 0 2	10 7 11 5 8 0 136

TABLE A-3. FEMALE RESPONSES TO PART II

		1 /	IDLE A	-30 FL	MACE P	1201 0110			•	
				FEMALE	S OUT	OF STA	TE	1		
	1 5	215	315	415	515	615	715	815	915	X
18	14	30	25	20	37	42	13	0	0	14
	11	15	15	20	22	30	18	34	0	30
19	1	0	ii	19	25	60	19	10	6	44
20		1	5	10	9	46	21	14	29	58
21	2	•	45	53	54	18	0	0	0	23
22	0	2	21	31	44	13	35	0	0	40
23	3	3 37	45	Õ	Õ	3	Ō	0	0	13
24	97			1	ĭ	41	Ö	0	0	35
25	66	23	28	1	2	3	ŏ	Ŏ	2	8
26	178	0	1	1 2	2 2	4	Ŏ	36	6	29
27	116	0	0		Õ	2	8	0	Ö	13
28	121	16	15	20	1	3	46	ŏ	Ŏ	33
29	81	8	9	14	3	1	0	ŏ	ŏ	10
30	1	128	33	19			8	7	3	12
31	58	18	22	40	15	12	27	30	29	58
32	0	6	21	8	11	5		16	ő	119
33	6	11	7	10	3	10	13	0	ő	3
34	113	79	0	0	0	0	0		ŏ	13
35	74	25	15	1	26	18	23	0	1	24
36	9	3	4	27	69	1	42	15	•	24
					-	THE ET	ATE			
			- 4 -	FEMALE		THE ST	715	815	915	X
	1'5	215	3'5	415	515		18	0	Ó	13
18	25	49	34	30	31	43	16	Ö	ŏ	72
19	8	42	25	15	26	39	27	9	10	50
20	1	2	16	21	38	6 <b>9</b>		7	7	101
21	0	0	8	12	28	54	26 2	ó	ò	22
22	4	14	63	56	53	29		0	ŏ	88
23	1	6	28	21	36	19	44	Ö	Ŏ	12
24	128	37	61	1	0	4	0	0	ŏ	81
25	56	17	26	3	8	52	0	0	4	11
26	217	3	0	3	1	3			11	72
27	93	0	0	2	3	8	2	52		16
28	158	21	14	20	2	5	7	0	0	75
29	80	12	8	10	0	3	55	0	0	15
30	1	137	52	25	8	1	0	1	3	
31	107	44	29	17	8	5	0	1	5	27
32	243	0	0	0	0	0	0	0	0	0
33	5	9	4	3	0	8	11	15	3	185
34	87	146	0	0	0	0	0	0	0	10
35	74	49	23	0	33	11	42	0	0	11
00										
36	19	4	6	9	35 SPGND	3	96	12	3	56

TAR	LE A-4.	OUT OF	STATE MALE	RESPONSES	TO PART	111
170	1'5	215	315	415	X	
37	151	24	21	21	13	
38	132	32	25	30	11	
39	125	38	23	33	11	
40	151	34	17	15	13	
41	138	36	24	18	14	
42	170	18	16	10	16	
43	116	41	40	23	10	
44	126	50	29	12	13	
45	78	21	39	81	11	
46	164	18	20	15	13	
47	117	39	30	31	13	
48	120	41	22	35	12	
49	176	15	9	6	24	
50	156	4	15	2:	16	
51	110	16	27	59	18	
52	48	23	31	113	15	
53	37	23	35	126	9	
54	86	34	25	69	16	
55	198	3	6	8	15	
56	114	43	38	24	11	
57	178	12	14	15	11	
58	205	6	2	3	14	
59	192	6	4	6	22	
60	163	4	6	43	14	
61	55	0	0	C	175	
62	176	15	9	8	22	
63	142	46	20	10	12	
64	143	42	20	9	16	
65	130	36	30	20	14	
66	170	28	12	6	14	
67	121	44	23	29	13	
68	48	39	50	81	12	
69	79	35	44	59	13	
70	97	42	47	30	14	
71	110	36	32	39	13	
72	147	33	21	15	14	
73	178	14	13	11	14	
74	149	28	23	17	13	
75	131	49	22	14	14	
76	136	36	21	22	15	
	X- THO	SE WHO	DID NOT RES	POND		

		****	MALE RESPON	ISES TO PART	111
TABL		INSTATE 2'S	315	415	X
	1'5	23	10	15	22
37	96	14	14	28	23
38	88 90	17	13	24	23
30	111	12	14	6	24
40 41	97	18	15	11	26
42	-96	15	14	20	22
43	81	27	18	21	20
44	82	37	17	11	20
45	55	28	33	33	18
46	107	12	11	18	19
47	78	23	22	23	21
48	81	22	26	18	20
49	101	13	7	10	36 23
50	117	0	8	19	21
51	98	12	16	20	27
52	105	6	11	18 54	22
53	49	19	23	35	24
54	74	17	17 1	2	25
55	135	4	30	26	25
56	65	21	8	21	25
57	108	5	ì	3	24
58	137	2 1	7	3	30
59	126	2	Ò	19	26
60	120	Õ	Ŏ	0	123
61	44	13	7	10	35
62	102 75	38	23	8	23
63	73	35	26	11	22
64 65	84	27	22	12	22
66	102	23	14	6	22
67	86	32	19	7	23
68	35	33	32	46	21
69	48	25	32	39	23
70	68	33	26	16	22 21
71	73	36	21	16	22
72	96	29	14	6	23
73	114	10	8	12	21
74	95	19	22	10	25
75	78	38	13	13	24
76	81	21	25	16	64
	X- TH	IOSE WHO	DID NOT RES	FUND	

TARI	E A-6.	OUT OF ST	ATE FEMALE	RESPONSES	TO PART	111
INDE	115	2'5	315	4 • 5	X	
37	137	9	14	15	21	
38	131	9	11	22	22	
39	125	18	20	9	23	
40	131	16	14	11	23	
41	119	22	14	15	25	
42	135	9	10	19	22	
43	135	15	6	17	22	
44	121	28	15	8	23	
45	87	26	22	40	20	
46	150	12	5	6	22 21	
47	110	19	24	21	22	
48	117	24	18	14	33	
49	147	8	3	4	27	
50	142	9	5	12	25	
51	117	9	12	32	22	
52	63	16	17	77	23	
53	64	16	19	73 28	30	
54	102	14	21	28	23	
55	135	5	3	29 34	24	
56	86	29	22 4	10	24	
57	154	3	7	84	22	
58	78	4	5	94	35	
59	58	3	6	16	28	
60	139	6	Ö	17	32	
61	145	1 7	5	* 7	31	
62	145		9	ģ	23	
63	138	16	14	7	23	
64	131	20 25	19	32	22	
65	97	25 18	ií	7	25	
66	134	18 15	2?	24	20	
67	113	15	24	56	21	
68	79	18	16	33	23	
69	105	23	30	28	23	
70	91	28	13	41	20	
71	93	17	15	8	23	
72	132	9	10	7	24	
73	145	18	18	24	22	
74	113	28	17	22	22	
75	106	28	13	23	24	
76	114	OCE WHO DI	D NOT RESP		_	
	X- TH	OSE MUO DI	A 1101 1100			

TAB	LE A-7.	INSTATE	FEMALE R	ESPONSES	TO PART III
	1'5	215	315	415	X
37	150	15	14	18	46
38	141	14	18	21	49
39	169	12	6	11	45
40	146	24	15	9	49
41	136	24	17	17	49
42	175	6	7	7	48
43	156	11	15	12	49
44	146	25	17	8	47
45	130	25	25	15	48
46	181	4	5	6	47
47	156	15	16	9	47
48	159	16	8	12	48
49	167	7	3	6	60
50	171	5	5	7	55
51	157	9	7	11	59
52	152	8	10	13	60
53	117	22	22	27	55
54	139	11	15	20	58
55	115	6	13	60	49
56	134	18	21	22	48
57	176	5	4	8	50
58	146	1	6	38	52
59	141	2 3	3	46	51
60	168		4	16	52
61	128	0	5	59	50
62	158	4	7	10	64
63	146	28	12	7	50
64	150	22	11	10	50
65	112	32	22	29	48
66	162	15	6	9	<b>51</b>
67	123	25	22	24	49
68	115	20	19	41	48
69	141	17	24	21	50
70	121	25	32	16	49
71	113	25	29	32	44
72	154	11	13	11	54
73	167	13	7	5	51
74	126	28	19	22	48 51
75	123	32	21	16	51 63
76	132	24	16	19	52
	X- THO	SE WHO D	ID NOT RE	.SPUND	

### TABLE A-8. MALE AND FEMALE TOTALS TO PART I

		М	ALES	TOTAL						
	1'5	215	315	415	515	615	715	815	915	X
1	397	0	0	0	0	0	0	0	0	0
2	38	345	8	2	3	0	0	0	0	1
3	54	136	146	44	13	0	0	0	0	4
4	116	162	86	24	3	0	9	0	0	6
5	25	147	90	43	31	22	12	12	14	1
6	11	178	69	90	39	3	3	3	0	1
7	i	21	118	85	77	47	47	0	0	1
8	7	76	131	69	52	35	27	0	0	0
9	4	32	19	51	12	88	10	40	136	5
16	74	320	í	ō	Ō	0	0	0	0	2
17	21	44	26	239	5	9	9	42	0	2
11	21	77								
		F	EMALE	S TOT	AL					
	1'5	215	315	415	515	615	715	8'5	915	X
1	0	438	0	0	0	0	0	0	0	0
2	57	343	14	2	22	0	3	0	0	0
3	177	147	87	15	4	0	0	0	0	8
4	234	138	47	6	0	0	0	0	0	13
5	94	142	34	31	31	25	16	12	52	1
6	48	283	65	15	12	3	1	10	0	1
7	5	46	146	74	64	32	71	0	0	0
8	18	103	152	43	48	18	53	0	0	3
9	9	41	27	91	19	65	7	31	146	2
16	151	284	Ö	0	0	0	0	0	0	2 3 3
17	90	14	157	145	1	0	4	24	0	3
• •		HOSE		DID NO	T RES	SPOND				

TABLE A-9. MALE AND FEMALE TOTALS TO PART II

		MA	LES 1	TOTAL						
	1'5	2'5	315	415	515	615	715	8'5	915	X
18	55	85	70	38	38	70	32	2	0	7
19	28	64	49	38	50	60	44	39	0	25
20	0	5	39	46	74	123	33	27	17	33
21	ĭ	3	20	34	45	103	53	28	54	56
22	6	18	88	88	101	71	3	0	1	21
23	5	12	57	66	75	79	63	0	0	41
24	51	109	205	0	1	12	2	0	0	17
25	35	78	146	9	18	72	0	0	0	39
26	330	20	5	15	2	5	3	0	4	13
27	238	19	6	19	0	5	3	47	31	29
28	205	53	36	47	17	11	10	2	0	16
29	152	50	31	29	19	18	67	0	0	31
30	1	148	75	53	36	37	13	13	10	11
31	35	47	47	52	45	44	25	32	55	15
32	167	3	12	3	7	10	51	31	46	67
33	6	17	3	12	2	18	25	15	5	294
34	262	124	0	0	0	0	0	0	0	11 11
35	123	94	35	7	53	21	53	0	0	66
36	38	19	20	126	4	5	78	35	6	86
			EMALE				716	915	015	×
	1'5	215	315	415	5 <b>'</b> S	6'5	715	8'5	915	X 27
18	1'S 39	2'S 79	31S 59	4'S 50	5 ' S 68	85	31	0	0	27
18 19	_	2'S 79 57	3 S 59 40	4'S 50 35	5 <sup>1</sup> S 6 8 4 8	85 69	31 34	0 34	0	27 102
	39 19 2	2'S 79 57 2	3 S 59 40 27	4 S 50 35 40	5 1 S 6 8 4 8 6 3	85 69 129	31 34 46	0 34 19	0 0 16	27 102 94
19	39 19	2'S 79 57 2	3'S 59 40 27 13	4 S 50 35 40 22	5 ' S 68 48 63 37	85 69 129 100	31 34 46 47	0 34 19 21	0 0 16 36	27 102 94 159
19 20	39 19 2	2'S 79 57 2 1	3'S 59 40 27 13	4'S 50 35 40 22 109	5'S 68 48 63 37	85 69 129 100 47	31 34 46 47 2	0 34 19 21 0	0 0 16 36 0	27 102 94 159 45
19 20 21	39 19 2 2	2'S 79 57 2	3'S 59 40 27 13 108 49	4'S 50 35 40 22 109 52	5'S 68 48 63 37 107 80	85 69 129 100 47 37	31 34 46 47 2 79	0 34 19 21 0	0 0 16 36 0	27 102 94 159 45 128
19 20 21 22	39 19 2 2 4	2'S 79 57 2 1 16 9	3'S 59 40 27 13 108 49 106	4'S 50 35 40 22 109 52	5'S 68 48 63 37 107 80	85 69 129 100 47 37	31 34 46 47 2 79	0 34 19 21 0 0	0 0 16 36 0 0	27 102 94 159 45 128 25
19 20 21 22 23	39 19 2 2 4 4 225 122	2'S 79 57 2 1 16 9 74 40	3'S 59 40 27 13 108 49 106 54	4'S 50 35 40 22 109 52	5'S 68 48 63 37 107 80 0	85 69 129 100 47 37 7 93	31 34 46 47 2 79 0	0 34 19 21 0 0	0 0 16 36 0 0	27 102 94 159 45 128 25 116
19 20 21 22 23 24	39 19 2 2 4 4 225 122 395	2'S 79 57 2 1 16 9 74 40 3	3 · S 59 40 27 13 108 49 106 54	4 S 50 35 40 22 109 52 1	5'S 68 48 63 37 107 80 0	85 69 129 100 47 37 7 93	31 34 46 47 2 79 0	0 34 19 21 0 0 0	0 0 16 36 0 0 0	27 102 94 159 45 128 25 116 19
19 20 21 22 23 24 25	39 19 2 2 4 4 225 122	2'S 79 57 2 1 16 9 74 40 3	3'S 59 40 27 13 108 49 106 54	4'S 50 35 40 22 109 52 1 4	5'S 68 48 63 37 107 80 9	85 69 129 100 47 37 7 93 6	31 34 46 47 2 79 0 0	0 34 19 21 0 0 0 0	0 0 16 36 0 0 0 0 6	27 102 94 159 45 128 25 116 19
19 20 21 22 23 24 25 26	39 19 2 2 4 4 225 122 395	2'S 79 57 2 1 16 9 74 40 3 0 37	3'S 59 40 27 13 108 49 106 54 1 0	4'S 50 35 40 22 109 52 1 4 4 4	5'S 68 48 63 37 107 80 9	85 69 129 100 47 37 7 93 6 12	31 34 46 47 2 79 0 0 1 2	0 34 19 21 0 0 0 0 0 88	0 0 16 36 0 0 0 0 6 17	27 102 94 159 45 128 25 116 19 101 29
19 20 21 22 23 24 25 26 27	39 19 2 2 4 4 225 122 395 209	2'S 79 57 2 1 16 9 74 40 3 0 37 20	3'S 59 40 27 13 108 49 106 54 1 0 29 17	4 S 50 35 40 22 109 52 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	5'S 68 48 63 37 107 80 9 3 5 2	85 69 129 100 47 37 7 93 6 12 7	31 34 46 47 2 79 0 1 2 15	0 34 19 21 0 0 0 0 0 88 0	0 0 16 36 0 0 0 0 6 17 0	27 102 94 159 45 128 25 116 19 101 29 108
19 20 21 22 23 24 25 26 27 28	39 19 2 2 4 4 225 122 395 209 279 161 2	2'S 79 57 2 1 16 9 74 40 3 0 37 20 265	3 · S 59 40 27 13 108 49 106 54 1 0 29 17 85	4 S S S S S S S S S S S S S S S S S S S	5'S 68 48 63 37 107 80 0 9 3 5 2 1	85 69 129 100 47 37 7 93 6 12 7 6	31 34 46 47 2 79 0 0 1 2 15 101	0 34 19 21 0 0 0 0 0 88 0	0 0 16 36 0 0 0 0 6 17 0	27 102 94 159 45 128 25 116 19 101 29 108 25
19 20 21 22 23 24 25 26 27 28 29	39 19 2 2 4 4 225 122 395 209 279 161 2 165	2'S 79 57 2 1 16 9 74 40 3 0 37 265 62	3'S 59 40 27 13 108 49 106 54 1 0 29 17 85	4'S 50 35 40 22 109 52 1 4 4 4 40 24 44 57	5'S 68 48 63 37 107 80 9 3 5 2 1 11 23	85 69 129 100 47 37 7 93 6 12 7 6	31 34 46 47 2 79 0 0 1 2 15 101 0 6	0 34 19 21 0 0 0 0 88 0	0 0 16 36 0 0 0 0 6 17 0 0	27 102 94 159 45 128 25 116 19 101 29 108 25 39
19 20 21 22 23 24 25 26 27 28 29 30	39 19 2 2 4 4 225 122 395 209 279 161 2 165 243	2'S 79 57 2 1 16 9 74 40 3 0 37 20 265 62 6	3'S 59 40 27 13 108 49 106 54 1 0 29 17 85 51 21	4'S 50 35 40 22 109 52 1 4 4 40 24 457 8	5'S 68 48 63 37 107 80 9 3 5 2 1 11 23 11	85 69 129 100 47 37 7 93 6 12 7 6 2 17 5	31 34 46 47 2 79 0 0 1 2 15 101 0 6 27	0 34 19 21 0 0 0 0 88 0 0	0 0 16 36 0 0 0 6 17 0 0 3 8 29	27 102 94 159 45 128 25 116 19 101 29 108 25 39 58
19 20 21 22 23 24 25 26 27 28 29 30 31	39 19 2 2 4 4 225 122 395 209 279 161 2 165 243 11	2'S 79 57 2 1 16 9 74 40 3 0 37 20 265 62 62	3'S 59 40 27 13 108 49 106 54 1 0 29 17 85 51 21	4 S S S S S S S S S S S S S S S S S S S	5'S 68 48 63 37 107 80 0 9 3 5 2 1 11 23 11 3	85 69 129 100 47 37 93 6 12 7 6 2 17 5	31 34 46 47 2 79 0 0 1 2 15 101 0 6 27 24	0 34 19 21 0 0 0 0 88 0 1 8 30 31	0 0 16 36 0 0 0 0 6 17 0 3 8 29 3	27 102 94 159 45 128 25 116 19 101 29 108 25 39 58 304
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	39 19 2 2 4 4 225 122 395 209 279 161 2 165 243 11 200	2'S 79 57 2 1 16 9 74 40 3 0 37 20 265 62 20 225	3'S 59 40 27 13 108 49 106 54 1 0 29 17 85 51 21	4'S 50 35 40 22 109 52 1 4 4 40 24 44 57 8 13	5'S 68 48 63 37 107 80 0 9 3 5 2 1 11 23 11 3 0	85 69 129 100 47 37 7 93 6 12 7 6 2 17 5 18 0	31 34 46 47 2 79 0 0 1 2 15 101 0 8 27 24 0	0 34 19 21 0 0 0 0 88 0 1 8 30 31	0 0 16 36 0 0 0 0 6 17 0 0 3 8 29 3	27 102 94 159 45 128 25 116 19 101 29 108 25 39 58 304 13
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	39 19 2 2 4 4 225 122 395 209 279 161 200 148	2'S 79 57 2 1 16 9 74 40 3 0 37 20 265 62 62 225 74	3'S 59 40 27 13 108 49 106 54 1 0 29 17 85 51 21 11 0 38	4'S 50 35 40 22 109 52 1 4 4 4 40 24 44 57 8 13 0 1	5'S 68 48 63 37 107 80 9 3 5 2 1 11 23 11 3 9 59	85 69 129 100 47 37 7 93 6 12 7 6 2 17 5 18 0	31 34 46 47 2 79 0 0 1 2 15 101 0 6 27 24 0 65	0 34 19 21 0 0 0 0 88 0 0 1 8 30 31	0 0 16 36 0 0 0 0 6 17 0 3 8 29 3	27 102 94 159 45 128 25 116 19 101 29 108 25 39 58 304 13 24
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	39 19 2 2 4 4 225 122 395 209 279 161 200 148 28	2'S 79 57 2 1 16 9 74 40 3 0 37 20 265 62 62 225 74	3'S 59 40 27 13 108 49 106 54 0 29 17 85 51 21 11 0 38	4'S 50 35 40 22 109 52 1 4 4 4 40 24 44 57 8 13 0 1	5'S 68 48 63 37 107 80 9 3 5 2 1 11 23 11 3 9 104	85 69 129 100 47 37 7 93 6 12 7 6 2 17 5 18 0	31 34 46 47 2 79 0 1 15 101 0 65 138	0 34 19 21 0 0 0 0 88 0 1 8 30 31	0 0 16 36 0 0 0 0 6 17 0 0 3 8 29 3	27 102 94 159 45 128 25 116 19 101 29 108 25 39 58 304 13

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TABLE A-10. MALE AND FEMALE TOTALS TO PART III

	M A	LES TO	OTAL				FEM	ALES	TOTAL		
	1'5	2'5	315	415	X			215	315	415	X
37	247	47	31	36	35	*	287	24	28	33	67
38	220	46	39	58	34	#	272	23	29	43	71
<b>39</b>	215	55	36	57	34	*	294	30	26	20	68
40	262	46	31	21	37	*	277	40	29	20	72
41	235	54	39	29	40	*	255	46	31	32	74
42	266	33	30	30	38	*	310	15	17	26	70
43	197	68	58	44	30	*	291	26	21	29	71
44	208	87	46	23	23	*	267	53	32	16	70
45	133	49	72	114	29	*	217	51	47	55	68
46	271	30	31	33	32	*	331	16	10	12	69
47	195	62	52	54	34	*	266	34	40	30	68
48	201	63	48	53	32	*	276	40	26	26	70
49	277	28	16	16	60	*	314	15	6	10	93
50	273	4	23	58	39	#	313	14	10	19	82
51	208	28	43	79	39	*	274	18	19	43	84
52	153	29	42	131	42	*	215	24	27	90	82
53	86	42	58	180	31	*	181	38	41	100	78
54	160	51	42	104	40	#	241	25	36	48	88
55	333	7	7	10	40	*	250	11	16	89	72
56	179	64	68	50	36	*	220	47	43	56	72
57	286	17	22	36	36	#	330	8	8	18	74
58	342	8	3	6	38	*	224	5	13	122	74
59	318	7	11	9	52	*	199	5	8	140	86
60	283	6	6	62	40	*	307	9	10	32	80
61	99	Ō	0	0	298	*	273	1	5	76	82
62	278	28	16	18	57	*	303	11	12	17	95
63	217	84	43	18	35	*	284	44	21	16	73
64	216	77	46	20	38	*	281	42	25	17	73
65	214	63	52	32	36	*	209	57	41	61	70 76
66	272	51	26	12	36	*	296	33	17	16	69
67	207	76	42	36	36	*	236	40	45	48	69
68	83	72	82	127	33	#	194	35	43	97 54	73
69	127	60	76	98	36	*	246	35	30	54 44	72
70	165	75	73	48	36	*	212	48	62		64
71	183	72	53	55	34	*	206	53	42	73 19	77
72	243	62	35	21	36	*	286	28	28		75
73	292		21	23	37	*	312	22	17	12 46	70
74	244		45	27	34	*	239	46	37		73
75	209	_	35	27	39	*	229	60	38	38	76
76	217		46	38	39	*	246	45	29	42	10
. •	X-		WHO !	DID NO	T RES	POND					

			TABL	E A-11.	ALL	RESPONS	ES TO	PART	I	
	115	215	315	415	515	615	7'5	815	915	X
•	397	438	Ö	0	0	0	0	O	0	0
•	95	688	22	4	25	0	0	0	0	1
2			233	59	17	Ŏ	0	0	0	12
3	231	283		-	• •	ŏ	Ŏ	٥	0	19
4	350	300	133	30	2	•	•	•	_	- 2
5	119	289	124	74	62	47	28	24	66	6
6	59	461	134	105	51	6	4	13	0	2
7	6	67	264	159	141	79	118	0	0	1
	25	179	283	112	100	53	80	0	0	3
0	_	_		142	31	153	17	71	282	7
9	13	73	46	_			0	٥	٥	5
16	225	604	1	0	0	0	_	•	•	
17	111	58	183	384	6	9	13	66	0	7
	X- TH	OSE WHO	DID	NOT RES	POND					

			TABLE	A-12.	ALL	RESPONS	SES TO	PART	11	
	1'5	215	315	415	515	615	7'5	8 5	915	X
18	94	164	129	88	106	155	63	2	0	34
19	47	121	89	73	98	129	78	73	0	127
			66	86	137	252	79	46	33	127
20	2	7			82	203	100	49	90	215
21	3	4	33	56					ĩ	66
22	10	34	196	197	208	118	5	0		
23	9	21	106	118	155	116	142	0	0	169
24	276	183	311	1	1	19	2	0	0	42
25	157	118	200	13	27	165	0	0	0	155
				19	5	11	4	0	10	32
26	725	23	6		5	17	5	135	48	130
27	447	19	6	23			_	2	Ö	45
28	484	90	65	87	19	18	25			
29	313	70	48	53	20	24	168	0	0	139
30	3	413	160	97	47	39	13	14	13	36
31	200	109	98	109	68	61	<b>3</b> 3	40	63	54
		9	33	11	18	15	78	61	75	125
32	410	_			5	36	49	46	8	598
33	17	37	14	25			ő	0	Ŏ	24
34	462	349	0	0	0	0			=	35
35	271	168	73	8	112		118	0	0	
36	66	26	30	162	108	9	216	62	10	146
-	X- TH			NOT RES	POND					

	TABLE A-13.	ALL	RESPONSES	TO PART III	
	1'5	215	315	415	X
37	_	71	59	69	102
38		69	68	101	105
39		85	62	77	102
40		86	60	41	109
41		100	70	61	114
42		48	47	5 <b>6</b>	108
43	488	94	. 79	73	101
44	475	140	78	39	103
45	350	100	119	169	97
46	602	46	41	45	101
47	461	96	92	84	102
48		103	74	79	102
49		43	22	26	153
50		18	33	77	121
51		46	62	122	123
52		53	69	221	124 109
53		80	99	280	128
54		76	78 23	152 99	112
55		18	23 111	106	108
56		111	30	54	110
57		25 13	16	128	112
50	_	12	19	149	138
59		15	16	94	120
61	_	í	5	76	380
6	- 1	39	28	35	152
63		128		34	108
64	_	119	_	37	111
6		120	_	93	106
6		84		28	112
6	-	116		84	105
6	_	107	125	224	102
6		95		152	109
7		123	135	92	108
7	-	125	95	128	98
7		90		40	113
7		46	_	35	112
7		93		73	104
7'		147		65	112
7		102		80	115
	X- THOSE	WHO	DID NOT RE	SPUND	

,	TABLE A-14.	RESPOND		AJORS	AND MINOR		DDE NUMBER
•	MALES-FE	0	999		1	0	997
1 2 3	1	Ö	981		2	ŏ	996
2	4		970		ī	Ŏ	987
		2	955		ī	Ŏ	970
4	4	0 2 7	950		ō	2	955
5	4	ć	940		8	11	950
6	3	0 2	930		10	9	930
	1	2	895		14	17	890
8		0 7	890		6	Ö	854
9	8	ó	854		11	ĭ	850
10	1 2	ĭ	850		1	ō	835
11		22	830		28	8	830
12		14	730		Q	ì	810
13		7	700		Š	19	730
14		ó	680		24	8	700
15		2	660		Ö	1	660
16		33	610		ĭ	10	610
17		11	590		33	31	590
18		3	57C		7	1	570
19		5	560		33	38	560
20		ó	550		1	Ō	550
21		ĭ	452		3	1	500
22	<b>d</b>	5	449		13	5	452
23		í	442		2	15	449
24	•	6	441		2	1	442
25		Ŏ	403		1	5	441
26	_	ĭ	401		ī	1	402
27	· _ <del>-</del>	55	400		1	5	401
28		1	357		45	104	400
		3	355		2	0	355
3( 3)	•	31	353		13	13	353
32	•	173	352		3	8	352
		1	-350		0	1	351
33		ō	330		5	0	350
34		Ŏ	259		5 1	0	254
3		ì	250		9	1	250
3		15	210		10	6	210
3(	-	-0	180		16	3	172
39		0 1	172		12	3	170
4(		5	170		6	15	120 110
4	1 6	3	120		6 2	1	110
4		Ŏ	110		1	0	57
4:		Ŏ	80		1	0	40
4		i	40		1	0	35
4		17	10		42	89	10
4		Ö	6		1	0	6
4		ŏ	4		3	3	4
4	·	0 1			1 3 1 3	3 1 0	3
4	<del>-</del>	ō	3 2 1		3		4 3 2 1
5		Ŏ	1		7	0	1
		•					

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#### TABLE A-15

## ACADEMIC MAJOR AND MINOR THREE DIGIT NUMERICAL CODES

001 Agriculture	930 Sociology
002 Industrial Arts	940 Bible
003 Library Science	950 Speech
004 Paligian	955 Drama
006 Animal Husbandry	970 Zoology
010 Accounting	970 Zoology 981-Vocational-
140 American Studies	999 Technical
060 Anthropology	
080 Architecture	
120 Art	
170 Biology	
172 Biological Science	
180 Botany	
210 Business Education	
250 Chemistry	
250 Chemistry (Pre-Med)	
251 Chemistry (Tre-Ned)	
254 Chemistry Emphasis	
330 Economics 350 Educational Administration	
350 Educational Administration	
352 Elementary Education	
353 Teacher Education	
355 Guidance and Counseling	
357 Curriculum and Supervision	
365 Special Education	
400 English	
403 English-Drama	
405 English-Journalism	
408 English-Speech	
441 French	
442 German	
449 Spanish	
500 General Business	
550 Geology	
560 Social Science	
570 Government	
590 History	
610 Home Economics	
660 Journalism	
680 Marketing	
700 Mathematics	
710 Microbiology	
730 Music	
810 Philosophy	
830 Physical Education	
835 Recreation	
850 Physics	
854 Physics Emphasis	
855 Physics-Mathematics	
890 Psychology	
-20	5-
-20.	<i>-</i> -

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TABLE A-16
CRITICAL INDEX FOR TEACHER TURNOVER

	MALES	FEMALES	OUT STATE	INSTATE
ADMINISTRATIVE AND SUPERVISORY FACTORS	0.66	0.48	0.59	0.56
COMMUNITY FACTORS	0.77	0.43	0.64	0.57
ECONOMIC FACTORS	1.18	0.73	1.25	0.66
PERSONAL AND FAMILY FACTORS	0.38	0.69	0.56	0.50
PUPIL FACTORS	0.60	0.49	0.51	0.58
WORKING CONDITIONS	0.87	0.70	0.82	0.74

TABLE A-17

# THE 1967-1968 RESIDENCES OF IDAHO 1966-67 TURNOVER TEACHERS

FREQUENCY	CODE NUMBER OF THE STATE
410	<u>1</u>
78	7
33	3
75	9
61	8
9	2
15	6
11	4
18	5
TO.	

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				18. (	RITICAL		FOR A	ALL MAL	ES	
	N	S	BERS M	D	N	S	M	D	TOTAL	WEIGHT
	••								_	
					VE AND	-	/ISORY	FACTOR		217
37	247	47	31	36	0.68	0.13	0.08	0.09 0.15	361 363	298
38	220	46	39	58	0.60	0.12 0.15	0.09	0.15	363	298
39	215	55	36	<b>57</b>	0•59 0•72	0.12	0.08	0.05	360	171
40	262	46	31 39	21 29	0.65	0.15	0.10	0.08	357	219
41	235	54	27	27	0007					
			OMMU	NITY I	FACTORS					100
42	266	33	30	30	0.74	0.09	0.08	0.08	359	183 316
43	197	68	58	44	0.53	0.18	0.15	0.11	367 364	248
44	208	87	46	23	0.57	0.23	0.12	0•06 0•30	368	535
45	133	49	72	114	0.36	0.13	0.19 0.08	0.09	365	191
46	271	30	31	33	0•74 0•53	0.08 0.17	0.14	0.14	363	328
47	195	62	52 4.0	54 53	0.55	0.17	0.13	0.14	365	318
48	201	63	4 <b>8</b> 16	16	0.82	0.08	0.04	0.04	337	108
49	277	28	10	10	0002					
			CONO	MIC F	ACTORS					001
50	273	4	23	58	0.76	0.01	0.06	0.16	358	224
51	208	28	43	79	0.58	0.07	0.12	0.22	358	351 506
52	153	29	42	131	0.43	0.08	0.11	0.36	355	506 69 <b>8</b>
53	86	42	58	180	0.23	0.11	0.15	0.49	366 357	447
54	160	51	42	104	0.44	0.14	0.11	0•29	331	771
			PERSO	NAI A	ND FAMI	LY FAC	TORS			
55	333	7	7	10	0.93	0.01	0.01	0.02	357	51
56	179	64	68	50	0.49	0.17	0.18	0.13	361	350
. 57	286	17	22	36	0.79	0.04	0.06	0.09	361	169
58	342	8	3	6	0.95	0.02	0.00	0.01	359	32
59	318	7	11	9	0.92	0.02	0.03	0.02	345	56 204
60	283	6	6	62	0.79	0.01	0.01	0.17	357 99	204 0
61	99	0	0	0	1.00	0.00	0.00	0.00 0.05	340	114
62	278	28	16	18	0.81	0.08	0.04	0.05	340	•••
			PUPIL	FACT	'APS					
	217	84	43	18	0.59	0.23	0.11	0.04	362	224
63 64	217 216	77	46	20	0.60	0.21	0.12	0.05	359	229
65	214	63	52	32	0.59	0.17	0.14	0.08	361	263
66	272	51	26	12	0.75	0.14	0.07	0.03	361	139
_					NOITION	NS 0 - 2 1	0.11	0.09	361	268
67	207	76	42	36	0•57 0•22	0.21 0.19	0.22	0.34	364	617
68	83	72 60	82 76	127 98	0.35	0.16	0.21	0.27	361	506
69 70	127 165	75	73	48	0.45	0.20	0.20	0.13	361	365
71	183	72	53	55	0.50	0.19	0.14	0.15	363	343
72	243	62	35	21	0.67	0.17	0.09	0.05	361	195
73		24	21	23	0.81	0.06	0.05	0.06	360	135
74		47	45	27	0.67	0.12	0.12	0.07	363 359	218 238
75		87	35	27	0.58	0.24	0.09	0.07	358 358	263
76	217	57	46	38	0.60	0.15	0.12	0.10	330	203

TABLE A-19. CRITICAL INDEX FOR ALL FEMALES NUMBERS PERCENTS										
	N	S	MBERS M	D	N	S	M	D	TOTAL	WEIGHT
			A DM T AL	CTDAT	IVE AND	SIIDED	VISORY	FACTOR	) c	
	207				0.77	0.06	0.07	0.08	372	179
37	287	24	28	33	0.74	0.06	0.07	0.11	367	210
38	272	23	29	43			0:07		370	
39	294	30	26	20	0.79	0.08		0.05	_	142
40	277	40	29	20	0.75	0.10	0.07	0.05	366	158
41	255	46	31	32	0.70	0.12	0.08	0.08	364	204
			COMMU		FACTORS					4.05
42	310	15	17	26	0.84	0.04	0.04	0.07	368	127
43	291	26	21	29	0.79	0.07	0.05	0.07	367	155
44	267	53	32	16	0.72	0.14	0.08	0.04	368	165
45	217	51	47	55	0.58	0.13	0.12	0.14	370	310
46	331	16	10	12	0.89	0.04	0.02	0.03	369	72
47	266	34	40	30	0.71	0.09	0.10	0.08	370	204
48	276	40	26	26	0.75	0.10	0.07	0.07	368	170
49	314	15	6	10	0.91	0.04	0.01	0.02	345	57
••								_		
			_	_	ACTORS				• • •	
50	313	14	10	19	0.87	0.03	0.02	0.05	356	91
51	274	18	19	43	0.77	0.05	0.05	0.12	354	185
52	215	24	27	90	0.60	0.06	0.07	0.25	356	348
53	181	38	41	100	0.50	0.10	0.11	0.27	360	420
54	241	25	36	48	0.68	0.07	0.10	0.13	350	241
			PERSO	NAL A	ND FAMI	LY FAC	TORS			
55	250	11	16	89	0.68	0.03	0.04	0.24	366	310
56	220	47	43	56	0.60	0.12	0.11	0.15	366	301
57	330	8	8	18	0.90	0.02	0.02	0.04	364	78
58	224	5	13	122	0.61	0.01	0.03	0.33	364	397
59	199	5	8	140		0.01	0.02	0.39	352	441
60	307	9	10	32	0.85	0.02	0.02	0.08	358	125
61	273	í	5	76	0.76	0.00	0.01	0.21	355	239
62	303	11	12	17	0.88	0.03	0.03	0.04	343	86
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			PUPIL				0 00	0.04	215	124
63	284	44	21	16	0.77	0.12	0.05	0.04	365	134
64	281	42	25	17	0.76	0.11	0.06	0.04	365	143
65	209	57	41	61	0.56	0.15	0.11	0.16	368	322
66	296	33	17	16	0.81	0.09	0.04	0.04	362	115
		1	WORKI	NG CO	NDITION	S				
67	236	40	45	48	0.63	0.10	0.12	0.13	369	274
68	194	35	43	97	0.52	0.09	0.11	0.26	369	412
69	246	35	30	54	0.67	0.09	0.08	0.14	365	257
70	212	48	62	44	0.57	0.13	0.16	0.12	366	304
71	206	53	42	73	0.55	0.14	0.11	0.19	374	356
72	286	28	28	19	0.79	0.07	0.07	0.05	361	141
73	312	22	17	12	0.85	0.06	0.04	0.03	363	92
74	239	46	37	46	0.64	0.12	0.10	0.12	368	258
75	229	60	38	38	0.62	0.16	0.10	0.10	365	250
76	246	45	29	42	0.67	0.12	0.08	0.11	362	229
10	270	77	47	74	J101	V-16	-100		<i>-</i>	